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PERSONAL.

Mr. H. E. Wells, of Columbus, O., has been appointed Superintendent of the city water-works and electric light plant of Rushville, Ind., to succeed Mr. A. T. Mahin, resigned.

Mr. Julius Le Roy Adams, Jun. Am. Soc. C. E., of Brooklyn, N. Y., has been appointed Chief Engineer of the Hartford, Manchester & Rockville Electric Ry. Co., Hartford, Conn.

Mr. William W. Locke, Assoc. M. Am. Soc. C. E., Sanitary Engineer of the Department of Health, Brooklyn, N. Y., was married Sept. 14, 1898, to Dr. Etta M. Ober, of Nashua, N. H.

Mr. William G. Price, M. Am. Soc. C. E., Chief Engineer of the Chicago City Ry. Co., has resigned to accept a position as engineer with the Peckham Motor Truck & Wheel Co., New York city.

Mr. David R. Lee, Assoc. M. Am. Soc. C. E., has been appointed Supervising Engineer of the Bleecker Reservoir Improvement, Albany, N. Y. He has been connected with the New York state canals, at Syracuse.

Mr. John B. Parsons, General Manager of the Union Traction Co., Philadelphia, Pa., has been elected President of the same, to succeed Mr. John L. Welsh, resigned. Mr. George D. Weidener has been elected Vice-President.

Mr. Frank A. Foster, civil engineer, of Dorchester, Mass., is a candidate for the State Legislature of Massachusetts. He was for 15 years in the office of the City Engineer, of Boston, and for the past four years has been conducting an engineering business in Dorchester, which was his birthplace.

Mr. William Barclay Parsons, M. Am. Soc. C. E., consulting engineer, of New York, and Chief Engineer of the Rapid Transit Board of that city, expects to sail from San Francisco, Cal., Oct. 25, for China, where he will undertake the location and construction of a system of railways for the Brice syndicate.

Mr. A. K. Shurtleff, General Foreman of Bridges and Buildings of the Fremont, Elkhorn & Missouri Valley R. R. and the Sioux City & Pacific R. R., with headquarters at Norfolk, Neb., has been appointed Division Engineer of the Kansas Division and Branches of the Union Pacific R. R., with headquarters at Kansas City, Mo., to succeed Mr. Charles Manhart, resigned.

Messrs. Andrew Onderdonk, Harvey C. Miller, Louis Hawkins, Eben S. Wheeler, M. Am. Soc. C. E., William D. Thomas, Richard B. Post, Percy J. Brune and Horatio H. Trundle, members of the party of engineers which has been engaged in the surveys of the Nicaragua Canal, arrived in New York, Sept. 27, on their way to Washington, D. C., to report to the Canal Commissioners.

Mr. George H. Morse, Electrical Engineer of the St. Joseph & Benton Harbor St. Ry., Electric Light & Power Co., Benton Harbor, Mich., has been appointed Instructor in Electrical Engineering and Machine Design in the University of Nebraska. He graduated from the University of Minnesota in 1893, and was for some time Instructor in Electrical Engineering in that institution.

Dr. William B. Phillips, M. Am. Inst. M. E., of Birmingham, Ala., has accepted the position of editor of the "American Manufacturer," of Pittsburg, Pa., and will take charge of that publication, Oct. 1. He was at one time a member of the staff of the "Engineering and Mining Journal," and has been a frequent contributor to that paper and to the "Mineral Industry." He has also been chemist to the Tennessee Coal, Iron & R. R. Co., and has been connected with the Alabama State University, Tuscaloosa, Ala., and the Alabama Geological Survey.

Mr. Charles E. Bigelow, President of the Geo. F. Blake Mfg. Co., 91 Liberty St., New York city, has accepted the office of President of the Gansvoort Bank in that city and will retire from the former position which he has held for the past four years. For nearly 32 years Mr. Bigelow has been connected with the Knowles Steam Pump Works, and, since its consolidation with the Geo. F. Blake Mfg. Co., he has been prominent in the affairs of the latter corporation. The employees of the company presented him with a handsome ebony gold-headed cane, Sept. 24, and the directors have adopted resolutions expressing their regret at his withdrawal. Mr. Bigelow was one of the organizers of the Gansevoort Bank a number of years ago.

Maj.-Gen. Grenville M. Dodge, U. S. Army, has been appointed President of the War Inquiry Commission, by President McKinley. He was graduated from Norwich University, Norwich, Vt., as a civil engineer, and served throughout the Civil War, being made successively Captain, Colonel, Brigadier-General and, on May 18, 1863, Major-General. He left the army in 1866, and built the Union Pacific Ry. and the Texas Pacific Ry. Since then he has been President of several railways, at present holding that office with the Fort Worth & Denver City R. R. The other members of the commission are: Maj.-Gen. Alexander McD. McCook, U. S. A.; Brig.-Gen. John M. Wilson, Chief of Engineers, U. S. Army, and M. Am. Soc. C. E.; Maj. Stephen C. Mills, Inspector-General, U. S. A., who is the Recorder of the Commission; Mr. Charles Denby, LL.D., who is a veteran of the Civil War, and who was from 1885 until July 11, 1898, Minister to China; Gen. James Beaver, a veteran of the Civil War, and formerly Governor of Pennsylvania; Col. Urban A. Woodbury, of Burlington, Vt., a veteran of the Civil War, and who has been both Lieutenant-Governor and Governor of Vermont; Capt. Evan P. Howell, a veteran of the Confederate Army and a prominent railway man of Georgia; Col. Jas. A. Sexton, a Civil War veteran and a member of the firm of Cribben, Sexton & Co., foundrymen, of Chicago, and Mr. Richard Weightman, who is the Secretary of the Commission and has been an editorial writer on the Washington, D. C., "Post" on subjects connected with conditions in Cuba.

OBITUARY.

Mr. William L. Langridge, builder, of Williamsburg, New York City, died of pneumonia, Sept. 27, aged 55.

Mr. Thomas Collins, of the firm of Collins Bros., railway contractors, of Bellefonte, Pa., died at his home in that city, Sept. 25, aged 75. The firm, which was originally composed of six brothers, is said to have built more miles of railway than any other firm in the world. Among the roads built by them were the Portage R. R. for the Pennsylvania R. R., in 1849, portions of the Philadelphia & Reading, the Lehigh Valley, the Central of New Jersey and others. Mr. Peter Collins is now the sole survivor of the family.

Mr. John M. Toucey, F. Am. Soc. C. E., formerly General Manager of the New York Central & Hudson R. R., died at his home, Garrisons-on-the-Hudson, N. Y., Sept. 23, aged 70. He was born in Newtown, Conn., and entered the railway service in 1848 as station agent on the Naugatuck R. R. He held this position until 1855, when he became connected with the Hudson River R. R., and in 1862 was made Assistant Superintendent of this road. In 1867 he was made Superintendent of the Hudson River Division of the New York Central & Hudson River R. R., and in 1881 became the General Superintendent. He was appointed as General Manager in 1890, and continued in that position until last May, when the office of General Manager was abolished. Mr. Toucey declined the position of Assistant to the President, which was created for him as a substitute, and resigned. He was then retired on a pension.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

ENGINEERS' CLUB OF COLUMBUS.
Oct. 1. Secy., H. M. Gates, 12½ North High St., Columbus, O.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
Oct. 3. Secy., C. L. Annan, City Engineers' Office, St. Paul, Minn.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Oct. 3. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

FRANKLIN INSTITUTE.
Oct. 5. Meeting Committee on Arts and Sciences. Secy., Wm. H. Wahl, 15 South 7th St., Philadelphia, Pa.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Oct. 5. Secy., C. W. Hunt, 220 W. 57th St., New York city.

ENGINEERS' CLUB OF ST. LOUIS.
Oct. 5. Secy., Richard McCulloch, 2401 N. Spring Ave., St. Louis, Mo.

WESTERN SOCIETY OF ENGINEERS.
Oct. 5. "Track Elevation of the Chicago & Northwestern Ry." Discussion. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.

BROOKLYN ENGINEERS' CLUB.
Oct. 6. Secy., A. J. Prevost, Jr., 191 Montague St., Brooklyn, N. Y.

CHICAGO ELECTRICAL ASSOCIATION.
Oct. 7. Secy., J. R. Cravath, 825 Monadnock Block, Chicago, Ill.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
Oct. 7. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.

MONTANA SOCIETY OF ENGINEERS.
Oct. 8. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

NATIONAL ROAD PARLIAMENT.
Oct. 8. Omaha, Neb. Martin Dodge, Director Office of Road Inquiry, Washington, D. C.

ENGINEERS' CLUB OF KANSAS CITY.
Oct. 10. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.

THE LOUISIANA ENGINEERING SOCIETY.
Oct. 10. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

NEW ENGLAND RAILROAD CLUB.
Oct. 11. Secy., Edw. L. Janes, P. O. Box 1158, Boston, Mass.

DENVER SOCIETY OF CIVIL ENGINEERS.
Oct. 11. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.

NORTHWEST RAILWAY CLUB.
Oct. 11. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Oct. 11. Secy., Wm. H. Searles, Case Library Building, Cleveland, O.

AMERICAN RAILWAY ASSOCIATION.
Oct. 12. Holland House, New York. Secy., W. F. Allen, 24 Park Place, New York.

ENGINEERING ASSOCIATION OF THE SOUTH.
Oct. 13. Secy., C. B. Wilson, 1000 Broad St., Nashville, Tenn.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
Oct. 13. Secy., C. A. McNab, 112 Mansfield St., Montreal, Canada.

ST. LOUIS RAILWAY CLUB.
Oct. 14. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.

ENGINEERS' CLUB OF PHILADELPHIA.
Oct. 15. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

TECHNICAL CLUB OF OMAHA.
Oct. 17. Secy., J. Harry Lawrie, Omaha, Neb.

ENGINEERS' CLUB OF MINNEAPOLIS.
Oct. 17. Secy., H. E. Smith, 1620 S. E. 4th St., Minneapolis, Minn.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Oct. 17. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Oct. 18. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

AMERICAN INSTITUTE OF MINING ENGINEERS.
Oct. 18. Annual meeting, Buffalo, N. Y. Secy., R. W. Raymond, P. O. Box 223, New York city.

AMERICAN ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.
Oct. 18-20. Annual meeting, Richmond, Va. Secy., S. F. Patterson, Boston & Maine R. R., Concord, N. H.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Oct. 19. Secy., Frank H. Olmsted, Los Angeles, Cal.

BOSTON SOCIETY OF CIVIL ENGINEERS.
Oct. 19. Secy., S. E. Tinkham, City Hall, Boston, Mass.

WESTERN FOUNDRYMEN'S ASSOCIATION.
Oct. 19. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

PENNSYLVANIA STREET RAILWAY ASSOCIATION.
Oct. 19-20. Annual meeting, Scranton, Pa. Secy., S. P. Light, Lebanon, Pa.

AMERICAN GAS LIGHT ASSOCIATION.
Oct. 19-21. Annual meeting, Niagara Falls, N. Y. Secy., Alfred E. Forstall, Montclair, N. J.

ENGINEERS' CLUB OF CINCINNATI.
Oct. 20. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

NEW YORK RAILROAD CLUB.
Oct. 20. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
Oct. 20. Secy., F. A. Charpiot, P. O. Box 13, Savannah, Ga.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENT.
Oct. 26-28. Annual meeting, Washington, D. C. Secy., D. L. Fulton, Bureau of Highways and Sewers, Allegheny, Pa.

SOCIETY OF NAVAL ARCHITECTS AND MARINE ENGINEERS.
Nov. 10-11. Annual meeting. Secy., Francis T. Bowles, 12 West 31st St., New York.

NEW ENGLAND RAILROAD CLUB.—On Sept. 13 this club enjoyed its annual outing. A special train conveyed the party of about 300 to Fox Point, Providence, where a special steamer was boarded and the trip continued to Crescent Park on the Providence River.

ENGINEERS' CLUB OF ST. LOUIS.—The meeting on Sept. 21 was made a memorial to the late Col. Henry Flad. Addresses were delivered by President Bryan and Mr. Robert Moore. The latter gave a sketch of Col. Flad's life, and paid a high tribute to his inventive genius and high personal character. Richard McCulloch, Secy.

MICHIGAN ENGINEERING SOCIETY.—The next annual meeting will be held at Lansing, Jan. 24 to 26, 1899. The following officers have been elected for the ensuing year: Pres., Prof. Chas. E. Green, Ann Arbor; Vice-Pres., Jay J. Hubbell, Manistee; Secy. and Treas., Frances Hodgman, Climax; Directors—J. D. Davis, Ann Arbor; Wm. D. Sears, Saginaw; Dorr Skeels, Grand Rapids.

RAILWAY SIGNALING CLUB.—The last meeting of this club was held Sept. 13 at the Great Northern Hotel, Chicago. The committee on standard designs for interlocking materials reported, presenting a list of parts that could be readily agreed upon for standardizing. A committee of five was appointed to recommend standard specifications for signaling apparatus. Following this the subject of distant signals and two wires for operating the same was discussed.

WESTERN RAILWAY CLUB.—This club held its first fall meeting on Sept. 20. Mr. G. W. Scott presented a paper on "Heating Large Railroad Stations, Shops and Buildings," in which the use of exhaust steam was recommended as the most economical and satisfactory method. The discussion which followed indicated that this was the opinion of most of those present. It was pointed out by Mr. Thurbell that many of the defects in heating systems were due to poor engineering and not to inherent defects in the system. The following subjects were also discussed: "Economy of and Limitations in Running Locomotives Long Distances;" "Is It Practical, Safe and Economical to Use Spliced Air-Brake Hose?"

THE ENGINEERS' CLUB OF PHILADELPHIA.—The last meeting of this Club was held Sept. 17, with 59 members and visitors present. The evening was devoted to a topical discussion "On the Proper Proportions of Parts of Steam Engines." This was quite generally participated in, the opinion of the majority being that it would be very desirable to adopt standard proportions for the various parts of steam engines intended to furnish standard amounts of horse-power in different classes of service, but that this would only be possible by adopting standards for the quality of materials employed. Secretary L. F. Rondinella announces that the system of conversational meetings will be resumed. They will occur on the second Saturday of each month during the ensuing session. The first meeting of this character will be on Oct. 8.

THE LOUISIANA ENGINEERING SOCIETY.—At the last meeting of this Society, which was held on Sept. 19, Mr. F. T. Llewellyn presented a paper on "The Evolution of Structural Design," postponed from the previous meeting. This paper pointed out the fact that the development of structural design is due rather to varying and improved conditions governing the cost and availability of material than to a more perfect knowledge of the theories of mechanics. Following the paper, Mr. P. E. Carriere exhibited a number of stereopticon views of European scenery.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES.—The following schedule of lectures is announced to be given under the auspices of the Department of Engineering: Sept. 30, "The Vessels in the United State Navy in Use in the Recent Spanish-American War," H. W. Raymond, Germantown, Pa.; Nov. 18, "Cableways as Employed in Construction Work and in Excavations," Spencer Miller; Dec. 16, "The Niagara Bridges," Richard S. Buck; Jan. 6, "The Civil and Military Engineering of the Cliff Dwellers," Robt. B. Stanton; Jan. 20, "Underground Rapid Transit and the Proposed Long Island Railway Tunnel between Atlantic Avenue and Lower Manhattan," Chas. E. Jacobs; Feb. 17, "The Brooklyn Water-Works," Arthur S. Tuttle; March 17, "Building Foundations," John F. O'Rourke; April 21, "The Engineering Features of Public Works in the Tropics," O. F. Nichols; May 19, "Deep Foundations of High Buildings and Piers," Henry W. Brinckerhoff.

ASSOCIATION OF EDISON ILLUMINATING COMPANIES.—The nineteenth meeting of this association was held at the Hotel Iroquois, Sault Ste. Marie, Sept. 12 and 13. Delegates were present from the Edison companies of Detroit, Chicago, Boston, Brooklyn and New York. At the first session the experience of the several companies in methods of charging for long-hour service was considered. The discussion developed the fact that several systems of charging were in use, but all agreed as to the benefits to be derived from special rates for long-hour service.

At the evening session, Mr. W. S. Barstow, of the Brooklyn Edison Co., described the system of transmission employed by his company, and Mr. J. W. Lieb, Jr., reported the conclusions of the investigating committee, consisting of Messrs. John Van Vleck, Arthur Williams and J. W. Lieb, Jr., which had been sent abroad to inspect foreign electric lighting systems. This was followed by a brief discussion dealing mainly with alternating current systems. The session of the second day began with a description of European meter practice and methods of installing lamps and systems of charging in vogue abroad, by Mr. Arthur Williams. This was followed by papers on metering by Messrs. E. A. Leslie and Charles S. Shepard, of New York, and O. J. Bushnell, of Chicago. The discussion of meters was continued at the afternoon session, at which Messrs. C. C. Perry and W. F. Kingan read papers on metering problems for small stations. The committee on Welsbach burners and acetylene gas presented a full report at this session. At the evening session, reports were received from the Executive Committee, the Committee on Incandescent Lamps, and the Lamp Testing Bureau, and the following officers were elected for 1898: Pres., R. R. Bowker, New York; Vice-Pres., G. R. Stetson, New Bedford, Mass.; Treas., W. S. Barstow, Brooklyn; Secy., Wilson S. Howell, Newark, N. J. (P. O. box 114). Executive Committee—Samuel Insull, Chicago; Chas. L. Edgar, Boston, Mass.; J. W. Lieb, Jr., New York; Alex. Dow, Detroit; J. H. Vail, Philadelphia.

As previously announced the steamer "Northwest," conveyed many of the visitors to and from the convention. On the return trip the delegates were treated to a carriage ride to the points of interest at Mackinaw Island by the General Electric Co.

AMERICAN INSTITUTE OF MINING ENGINEERS.—The seventy-fifth annual meeting of the Institute will be held at the Buffalo Library Bldg., Buffalo, N. Y., beginning Oct. 18. The excursion program includes a steamer excursion about the harbor on the afternoon of Oct. 19; a reception on the evening of Oct. 20; with a list of optional excursions for the morning and afternoon of Oct. 21. It is also planned to hold the business session of Oct. 21 at the International Hotel, Niagara Falls, where an illustrated paper on "Niagara Falls Water Power and Its Transmission and Utilization by Means of the Electric Current" will be presented. Saturday, the last day, will be spent in inspecting the many points of engineering and scenic interest.

The following is a partial list of the papers to be presented: "The Evolution of Mine-Surveying Instruments," Dunbar D. Scott; "Notes on the Forms Assumed by the Charge in the Blast Furnace, as Affected by Various Methods of Filling," Frank Firmstone; "Modern Cupola Practice, with Special Reference to the Discussion of the Physics of Cast-Iron," Bertrand S. Summers; "Experiments in the Sampling of Silver-Lead Bullion," G. M. Roberts; "The Influence of Bismuth on Brass, and Its Relation to Fire-Cracks," Erwin S. Sperry; "Graphic Records of the Screening of Crushed Material," Courtenay DeKalb; "Notes on the Mines of the Frontino and Bolivia Company, Columbia, S. A." Spencer Cragoe; "The Relations between the Chemical Constitution and the Physical Character of Steel," William R. Webster; "Does the Size of Particles have any Influence in Determining the Resistance of Fire-Clays to Heat and to Fluxes?" H. O. Hofman and B. Stoughton; "A Modification of Bischof's Method for Determining the Fusibility of Clays, as Applied to Non-Refractory Clays, and the Resistance of Fire-Clays to Fluxes," H. O. Hofman; "The Superficial Alteration of Western Australia Ore-Deposits," Herbert C. Hoover; "Mineral Lode Locations in British Columbia," William Braden; "The Kytchtym Medal," Dr. Persifor Frazer; "A New Assay for Mercury," Richard E. Chism; "The By-Product Coke-Oven in Some of Its Phases," W. H. Blauvelt; "The Alluvial Deposits of a Dry Country," T. A. Rickard; "Hübnerite in Arizona," Wm. P. Blake. There will also be discussions upon Professor Howe's paper on the "Use of the Tri-Axial Diagram and Triangular Pyramid for Graphical Illustration;" of Dr. Don's paper on the "Genesis of Ore-Deposits;" of Mr. Keller's paper on the "Elimination of Impurities from Copper-Mattes," and on the use of multiple tuyeres for the blast-furnace.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—This association held its 68th annual meeting at Bristol, England, Sept. 8—12. Like the American Society of similar name, the association is divided into various sections devoted to the consideration of special subjects. The following is a list of the papers presented of most interest to engineers:

Section A.—Mathematical and Physical Science.—"On the Conservation of Energy in the Human Body," E. B. Rosa and W. O. Atwater; "Comparison Between Charging a Secondary Cell at Constant Potential and at Constant Current, more especially as Regards Efficiency," A. A. Cahen and J. M. Donaldson; "On the Measurement of Small Differences in Resistance," E. H. Griffiths; "Continuity of Undulatory Theory for Sound Elastic-Solid Light and Electric Waves," Lord Kelvin; "A Platinum Voltmeter," Prof. H. L. Callendar; "The Carbon Consuming Cell of Jacques," S. Skinner; "On Standard High Resistance," J. B. Fawcett; "Experiments on the Influence of Electricity on Plants," S. Lemström; "The Temperature Coefficients of the Resistances Used in 1897 Determination of the Ohm," M. Solomon.

Conference on Terrestrial Magnetism and Atmospheric Electricity.—"On the Construction of Magnets of Constant Intensity Under Changes of Temperature," J. R. Ashworth; "On the Relative Advantages of Long and Short Magnets," Prof. Mascart; "On the Application of Terrestrial Magnetism to the Solution of Some Problems in Cosmical Physics," Prof Arthur Schuster; "On the Relations between the Variations in the Earth Currents, the Electric Currents from the Atmosphere, and the Magnetic Perturbations," Selim Lemström.

Section B.—Chemistry.—"A New Form of Stand for Electrolytic Analysis," Dr. Hugh Marshall; "On a 10-c. p. Lamp to be Used as a Standard of Light," A. G. Vernon Harcourt.

Section F.—Economic Science and Statistics.—"Municipalities as Traders," Geo. Pearson; "Ought Municipal Enterprises to Yield a Profit in Aid of Rates?" E. Cannan; "Economic and Social Influences of Electric Traction," Prof. S. P. Thompson.

Section G.—Mechanical Science.—"Electric Power in Workshops," A. Siemens; "The Application of the Electric Motor to Small Industrial Purposes and its Effect on Trade and on the Community Generally," A. H. Gibbings; "Notes on the Electric Lighting System at Bristol, with Special Reference to the Auxiliary Plant," H. Faraday-Proctor; "Electric Traction by Surface Contact," Prof. Silvanus Thompson and Miles Walker; "Combined Electric Lighting and Power Plant for Docks and Harbors," J. G. Aldridge; "Electrical Canal Haulage," A. H. Allen; "On the Pacific Cable," C. Bright.

AMERICAN SOCIETY OF CIVIL ENGINEERS.—The last meeting of this society was held on Sept. 21 at the Society House, New York. As announced, no regular paper was read, and the evening was devoted to the subject of Roads and Road Building.

Mr. James Owens favored thick roads, using a 5-in. telford topped with a 3-in. macadam in preference to an 8-in. macadam. The actual size of stone used should depend upon locality and traffic conditions, smaller sizes serving for light traffic. In all cases sizes of stone must not be mixed. Binders such as sand, gravel, loam, clay or ordinary earth should be used as a temporary means to get a road into shape. The work of the Massachusetts State Road Commission was outlined by Mr. W. E. McClintock. The most difficult roads, which were first built, cost about $10,300 per mile for a 15-ft. road. In most cases the roads consisted of 3 ins. of gravel, 6 ins. of rock, wedged, filled and covered with broken stone and rolled.

Mr. Budd, Road Commissioner of New Jersey, stated that in that state 300 miles of road had been completed under state control, and 300 miles more had been petitioned for. Early roads cost from $7,000 to $10,000. Now roads were made thinner and various modifications had been introduced until the cost had been reduced to $4,000 per mile. Good gravel roads averaged from $1,000 to $1,500 per mile where materials were convenient.

Mr. N. P. Lewis, Engineer of Street Construction and Maintenance, of Brooklyn, considered 20 to 30 ft. as the proper width of city streets and 12 ft. for country roads. Grades and drainage were very important and should receive full attention. He believed that an 8-in. macadam road 12 ft. wide could be built in most parts of New York state for $5,000 per mile and a 6-in. for $3,000.

Mr. E. W. Harrison, Chief Engineer of the Hudson County Public Roads, New Jersey, described the Hudson County Boulevard, which comprises 400,000 yds. of telford macadam, laid in the last 5 years. This road is like a city street, and is from 12 to 14 ins. deep. It is composed of 8 ins. of trap rock telford, 4 ins. of 2 to 2½-in. macadam, with 1½ in.-stone on top and finished to a height of 1½ ins. above grade, with a layer of screenings and flour well watered and rolled about 110 times with a 15-ton roller. Several others expressed their views upon the subject and it was decided to continue the discussion at another meeting.

BOSTON SOCIETY OF CIVIL ENGINEERS.—On Sept. 21 the society had an excursion in the afternoon and a regular monthly meeting in the evening. The excursion was to the new high service reservoir being built by the Metropolitan Water Board in the Middlesex Fells Reservation, which area forms a part of the Metropolitan Park System. The reservoir work comes in the division of the water system in charge of Mr. Dexter Brackett, M. Am. Soc. C. E., the chief engineer of the board being Mr. F. P. Stearns, M. Am. Soc. C. E. The reservoir will have a capacity of 38,000,000 to 40,000,000 gallons. The reservoir will be filled by pumping from Spot Pond, originally the source of the joint water supply of Malden, Melrose and Medfield, but now turned into a distributing reservoir for the Metropolitan Water System, water from the Chestnut Hill reservoir being pumped into Spot Pond, and the reservoir just named being filled from the old Sudbury River and New Nashua systems. The new reservoir in question will be described in a later issue.

At the evening session the chair was occupied by Mr. Howard Carson, M. Am. Soc. C. E., Chief Engineer of the Boston Transit Commission and President of the society. Mr. Carson announced that the piece of ancient lead water pipe, presented to the society by Mr. Clemens Herschel, M. Am. Soc. C. E., of New York city, had been suitably mounted in a glass case, and was on the desk before him and them. He also stated that the celebration of the fiftieth anniversary of the society would probably be held in November. The feature of the evening was a talk by Mr. Carson on the proposed East Boston Tunnel, illustrated by lantern slides, and including a review of various methods of submarine tunnelling. These the speaker divided into two general classes: (1) Working from headings by means of shields or otherwise and (2) building the tunnel in dredged trenches. According to Drinker's "Tunnelling," the first instance of the use of cast-iron plates, or a shield, was in 1864, under Barlow's patent, on a tunnel 7 ft. in diameter, beneath the Thames, near the London Tower, compressed air being used. Beach's shield followed, in 1865. Coming down to recent times, mention was made of the shield 27⅔ ft. high and 19½ ft. long used in the Blackwall tunnel, and of the small size of some recent London subways, only 10 to 11 ft. in diameter, with one railway track. Aside from water-works intakes of comparatively small size, the principal examples of the placing of tubes in dredged trenches were in connection with the Metropolitan Sewerage System. Here large tubes were lined with brick, towed to place and sunk in tidal waters. Although little work of this kind has been done, it has been the subject of many patents.

In the studies for the East Boston tunnel a diagram was prepared showing that two 16-ft. tunnels could be constructed in trenches with much less dredging and greater ease of construction than one 23½-ft. tube. The tripod derricks for lowering the 16-ft. tubes would have to be about 90 ft. in length. The tubes would be imbedded in concrete for a large part of their height.

Regarding the probable route of the tunnel and the conditions under which it might be built and operated, Mr. Carson explained that the statutes of 1894 authorized the Boston Transit Commission to build a two-track tunnel from the subway in Scollay Sq., Boston, to the street surface in Maverick Sq., East Boston, which involves a tunnel beneath the East Boston channel. The law of 1897 changes the location of the Boston end of the tunnel to or near Hanover Sq., and instead of saying the commission may connect these points, the act says it shall do so when the Boston Elevated Railway Co. applies for the right to construct a road on a certain route. The later act also provides that the company named shall pay the city 0.5% of the gross receipts of the company and 1 ct. for each passenger carried. There is some ambiguity in the last act as to whether it requires a tunnel beneath the streets of Boston.

As to the needs of a tunnel, the speaker stated that the population of East Boston is about 43,000, and of the other part of the city some 450,000. The East Boston ferries carry about 6,000,000 passengers each way per day and the Boston & Lynn Railway about 1,000,000 more.

Assuming the statute to require a subway for the whole distance between the two terminal points, the start at the Boston end would be made to avoid grade crossings with the present subway by carrying one under the other. The plans sent to the Secretary of War for approval showed the top of the tunnel not less than 35 ft. below the water level at each line of the Harbor Commission, and about 40 ft. below the deepest part of the channel. The shortest of the seven or eight lines studied would be about 6,350 ft. in length between the two terminal points. There would be two 16-ft. tubes, with feeder ducts on each side in the space between the vertical sides of the cars and the tubes. These ducts could be used for passengers to walk on in case of accidental stoppages to the cars. The estimates of cost of the tunnel were not gone into.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Sept. 29.	Court house,	Marietta, Ga.	Aug. 18
Sept. 29.	Water pipe, etc.,	Buffalo, N. Y.	Sept. 22
Sept. 29.	Street bonds,	Phillipsburg, N. J.	Sept. 22
Sept. 29.	Macadamizing, etc.,	Hadley, Mass.	Sept. 22
Sept. 29.	Macadamizing, etc.,	Boston, Mass.	Sept. 22
Sept. 29.	Highway (5,000 lin.ft.),	Walpole, Mass.	Sept. 22

Sept. 29. Brick paving, Scranton, Pa. ..... Sept. 29
Sept. 29. Grading, paving, etc., East Cleveland, O. .. Sept. 29
Sept. 29. Grading, St. Paul, Minn. ..... Sept. 29
Sept. 29. Bridge, Albany, Ore. ..... Sept. 29
Sept. 30. Dredging, New York, N. Y. ..... Sept. 29
Sept. 30. Pipe sewer, Boston, Mass. ..... Sept. 29
Sept. 30. Grading, filling, etc., Newark, N. J. ..... Sept. 29
Sept. 30. Brick walks, Richmond, Ind. ..... Sept. 29
Sept. 30. School building, Camden, N. J. ..... Sept. 29
Sept. 30. Asphalt paving, Niagara Falls, N. Y. ..... Sept. 22
Advertised, Engineering News, Sept. 22.
Sept. 30. Hospital, National Military Home, Kan. .. Sept. 22
Sept. 30. Macadam paving, Milford, Conn. ..... Sept. 22
Sept. 30. Pipe sewers, Des Moines, Ia. ..... Sept. 22
Sept. 30. Storm sewer, Amsterdam, N. Y. ..... Sept. 15
Sept. 30. Gravel road (7 miles), Rockville, Ind. ..... Sept. 15
Sept. 30. School building, Sheboygan, Wis. ..... Sept. 15
Sept. 30. Improving reservoir, Albany, N. Y. ..... Sept. 8
Advertised, Engineering News, Sept. 8.
Sept. 30. Coal shaft, Latrobe, Pa. ..... Sept. 8
Oct. 1. Arc lighting, Marshfield, Wis. ..... Aug. 18
Oct. 1. School building (equipment), St. Thomas, Ont. July 7
Oct. 1. Road roller, Sheboygan, Wis. ..... Sept. 1
Advertised, Engineering News, Sept. 1.
Oct. 1. Head-race (power plant), Montreal, Que. .... Sept. 1
Advertised, Eng. News, Sept. 1 to 15.
Oct. 1. Electric plant, New Richmond, O. ..... Sept. 15
Oct. 1. Arc lighting, Huntington, W. Va. ..... Sept. 15
Oct. 1. Canal work, Kirkersville, O. ..... Sept. 22
Oct. 1. Pipe sewers, Elizabeth, N. J. ..... Sept. 22
Oct. 1. Water-works, Beresford, S. Dak. ..... Sept. 22
Oct. 1. School-house bonds, Wadley, Ga. ..... Sept. 22
Oct. 1. Grading at navy yard, Brooklyn, N. Y. .... Sept. 29
Oct. 1. Paving bridge, Vacaville, Cal. ..... Sept. 29
Oct. 1. Curbing, paving, etc., Conshohocken, Pa. .. Sept. 29
Oct. 1. Dredging, Boston Navy Yard, Mass. ..... Sept. 29
Oct. 1. Retaining wall, Warren, Pa. ..... Sept. 29
Oct. 1. Pier, sluiceway, etc., Brantford, Ont. ..... Sept. 29
Oct. 1. Temporary bridge, Cambridge, Mass. ..... Sept. 29
Oct. 1. Pipe sewer, Greenville, Pa. ..... Sept. 29
Oct. 1. Water pipe, etc., Sonyea, N. Y. ..... Sept. 29
Oct. 3. Enamel signs, St. Paul, Minn. ..... Sept. 29
Oct. 3. Paving, grading, etc., Jersey City, N. J. .... Sept. 29
Oct. 3. School building, New Orleans, La. ..... Sept. 29
Oct. 3. Heating and ventilation, New York, N. Y. .. Sept. 29
Oct. 3. Bridge approach, Oroville, Cal. ..... Sept. 29
Oct. 3. Iron bridges (2), Hazlehurst, Miss. ..... Sept. 29
Oct. 3. Masonry dam, Columbus, O. ..... Sept. 29
Oct. 3. Pipe sewers, Albany, N. Y. ..... Sept. 29
Oct. 3. Locomotives, etc., London, England. ..... Sept. 29
Oct. 3. Masonry bridge, Kew, London, England. .... Sept. 29
Oct. 3. Flood gates, Dayton, O. ..... Sept. 22
Oct. 3. Macadam paving, Atlantic City, N. J. ..... Sept. 22
Advertised, Engineering News, Sept. 22.
Oct. 3. Brick paving, Atlantic City, N. J. ..... Sept. 22
Advertised, Engineering News, Sept. 22.
Oct. 3. Pile bridge, Topeka, Kan. ..... Sept. 22
Oct. 3. Bridge, Redwood City, Cal. ..... Sept. 22
Oct. 3. Bridge (115-ft. long), Westfield, Mass. ..... Sept. 22
Advertised, Engineering News, Sept. 22.
Oct. 3. Levee work, Dayton, O. ..... Sept. 22
Oct. 3. Lumber, New York, N. Y. ..... Sept. 22
Oct. 3. Steel bridges (2 spans), Waverly, Ia. ..... Sept. 22
Oct. 3. Deep well, Plankinton, S. Dak. ..... Sept. 22
Oct. 3. Church building, Mount Carmel, Ill. ..... Sept. 22
Oct. 3. Superstructure and repair, Chillicothe, O. .. Sept. 15
Oct. 3. Street work, Toledo, O. ..... Sept. 1
Oct. 3. Building plans, Liverpool, England. ..... Sept. 8
Oct. 3. Building superstructure, Philadelphia, Pa. .. Sept. 8
Advertised, Eng. News, Sept. 8 and 15.
Oct. 3. Bridge, Flandreau, S. Dak. ..... Sept. 8
Oct. 4. Coal conveyors, etc., Chicago, Ill. ..... Aug. 25
Advertised, Eng. News, Aug. 25 to Sept. 29.
Oct. 4. Bridge, Stockton, Cal. ..... Sept. 15
Oct. 4. Brick paving, etc., Norwalk, O. ..... Sept. 15
Oct. 4. Improving road, Deerfield, N. Y. ..... Sept. 22
Oct. 4. Electric plant, Barnesville, Minn. ..... Sept. 22
Oct. 4. Electric lighting, Philadelphia, Pa. ..... Sept. 22
Oct. 4. High-school building, Troy, N. Y. ..... Sept. 22
Oct. 4. Water-works, Eaton Rapids, Mich. ..... Sept. 22
Advertised, Eng. News, Sept. 22 and 29.
Oct. 4. Grading, etc., Troy, N. Y. ..... Sept. 29
Oct. 4. Additions to pumping station, Philadelphia. Sept. 29
Oct. 4. Sewer, Kansas City, Mo. ..... Sept. 29
Oct. 4. Sewer, New Haven, Conn. ..... Sept. 29
Oct. 4. Crushed stone, paving, etc., New Haven. .... Sept. 29
Oct. 4. Street improvements, Terre Haute, Ind. .... Sept. 29
Oct. 4. Steam piping, Gowanda, N. Y. ..... Sept. 29
Oct. 4. Capitol bonds ($100,000), St. Paul, Minn .... Sept. 29
Oct. 4. Broken stone, etc., Long Island City, N.Y. .. Sept. 29
Oct. 4. Fire hose, Dunkirk, N. Y. ..... Sept. 29
Oct. 5. School building, London, Ont. ..... Sept. 29
Oct. 5. Grading and material, Mamaroneck, N. Y. .. Sept. 29
Oct. 5. Heating apparatus, Fort Logan, Colo. ..... Sept. 29
Oct. 5. Bridge, Heppner, Ore. ..... Sept. 29
Oct. 5. Bridge (150 ft. long), Pontiac, Ill. ..... Sept. 29
Advertised, Engineering News, Sept. 29.
Oct. 5. Electric plant, Rathmines, Ireland. ..... Sept. 29
Oct. 5. Grading, paving, etc., Cleveland, O. ..... Sept. 22
Oct. 5. Granite paving, Cincinnati, O. ..... Sept. 15
Oct. 5. Bridge superstructure, Chicago, Ill. ..... Aug. 11
Oct. 5. Dredging, Oakland, Cal. ..... Sept. 8
Oct. 5. Shore protection, Fort Morgan, Ala. ..... Sept. 8
Advertised, Eng. News, Sept. 8 to 29.
Oct. 6. Electric light plant, St. Joseph, Ill. ..... Sept. 22
Advertised, Engineering News, Sept. 22.
Oct. 6. Water-works, Greensboro, Ga. ..... Sept. 22
Oct. 6. Oak sheeting, Cleveland, O. ..... Sept. 29
Oct. 6. Brick paving, Erie, Pa. ..... Sept. 29
Oct. 6. Paving, etc., and walks, Pittsburg, Pa. .... Sept. 29
Oct. 6. Grading and material, Ventura, Cal. ..... Sept. 29
Oct. 6. White oak sheeting, Cleveland, O. ..... Sept. 29
Oct. 6. Steam heating, Danville, Ill. ..... Sept. 29
Oct. 6. Water-works, Osage, Ia. ..... Sept. 29
Advertised, Engineering News, Sept. 29.
Oct. 7. Asphalt paving, Rochester, N. Y. ..... Sept. 29
Oct. 7. Brick paving, drainage, etc., Cleveland, O. .. Sept. 29
Oct. 7. Building, Oberlin, O. ..... Sept. 29
Oct. 7. Asphalt, brick paving, etc., Omaha, Neb. .. Sept. 29
Oct. 7. Water pipe, Milledgeville, Ill. ..... Sept. 29
Oct. 7. Arc lighting, Asheville, N. C. ..... Sept. 22
Oct. 7. Asphalt and macadam, Cleveland, O. ..... Sept. 22
Oct. 7. Granitoid sidewalks, St. Louis, Mo. ..... Sept. 22
Oct. 8. Bridge work, Cincinnati, O. ..... Sept. 22
Oct. 8. Bridge, New Baltimore, O. ..... Sept. 22
Oct. 8. School building, Bisbee, N. Dak. ..... Sept. 22
Oct. 8. Dredging, etc., League Island Navy Yard, Pa. . Sept. 29
Oct. 8. Electric plant, Baltimore, Md. ..... Sept. 29
Oct. 10. Grading and graveling, Muncie, Ind. ..... Sept. 29
Oct. 10. School building extension, Brooklyn, N. Y. .. Sept. 29
Oct. 10. Elevators (3), New York, N. Y. ..... Sept. 29
Oct. 10. Building brick, Philadelphia, Pa. ..... Sept. 29
Advertised, Eng. News, Sept. 29 and Oct. 6.
Oct. 10. Sewers and disposal plant, E. Cleveland, O. . Sept. 22
Oct. 10. Dredging, Wilmington, Del. ..... Sept. 22
Advertised, Eng. News, Sept. 15 and 22.
Oct. 10. Cement, stone, etc., Ft. Washington, D. C. .. Sept. 22
Advertised, Eng. News, Sept. 22 and 29.
Oct. 10. Asphalt and brick paving, Council Bluffs, Ia. Sept. 22
Oct. 10. Macadamising, St. Paul, Minn. ..... Sept. 22
Oct. 10. Turbine wheels (24), Wrightsville, Pa. ..... Sept. 8
Advertised, Eng. News, Sept. 8 and 15.
Oct. 10. Trestle, Chehalis, Wash. ..... Sept. 8
Oct. 10. Paving, Toledo, O. ..... Sept. 15
Oct. 11. School building, New Brunswick, N. J. ..... Sept. 29
Oct. 11. Building, Bonnton, N. J. ..... Sept. 29
Oct. 11. Municipal building work, Brooklyn, N. Y. .. Sept. 29
Oct. 12. Dredging, Lake Merritt, Oakland, Cal. ..... Sept. 29
Oct. 12. Brick work, Oxford, O. ..... Sept. 29
Oct. 12. Hospital buildings, San Francisco, Cal. .... Sept. 15
Oct. 12. Park bonds, Spokane, Wash. ..... Sept. 1
Oct. 12. Sewers, Cohoes, N. Y. ..... Sept. 29
Advertised, Eng. News, Sept. 29 and Oct. 6.
Oct. 13. Hire of dredging plant, Mobile, Ala. ..... Sept. 15
Advertised, Eng. News, Sept. 15 to Oct. 6.
Oct. 13. Portland cement, Seattle, Wash. ..... Sept. 29
Oct. 14. Pipe sewers, Madison, Wis. ..... Sept. 29
Advertised, Eng. News, Sept. 29 and Oct. 6.
Oct. 14. Cement walks, North Vernon, Ind. ..... Sept. 15
Oct. 15. Water-works, Wagoner, Ind. Ter. ..... Sept. 22
Advertised, Eng. News, Sept. 22 to Oct. 6.
Oct. 15. Masonry, woodwork, etc., Cincinnati, O. .... Sept. 22
Oct. 15. School building, Harris, Minn. ..... Sept. 22
Oct. 15. Sewers, Marietta, O. ..... Sept. 22
Oct. 15. Electric light plant, Charlotte, N. Y. ..... Sept. 29
Advertised, Eng. News, Sept. 29 and Oct. 6.
Oct. 15. Electric plant, Bremerton, Wash. ..... Sept. 29
Oct. 15. Water-works, Charlotte, N. Y. ..... Sept. 29
Advertised, Eng. News, Sept. 29 and Oct. 6.
Oct. 17. Street improvements, Hamilton, O. ..... Sept. 29
Oct. 17. Water pipe, Wytheville, Va. ..... Sept. 29
Oct. 17. Sewerage system, Mobile, Ala. ..... Sept. 22
Advertised, Eng. News, Sept. 22 to Oct. 6.
Oct. 17. Gasholder, etc., Edinburgh, Scotland. ..... Sept. 1
Oct. 18. Railway track, Cincinnati, O. ..... Sept. 22
Oct. 18. Stone, brick & asphalt pvg., Sharpsburg, Pa. Sept. 29
Advertised, Eng. News, Sept. 29 and Oct. 6.
Oct. 18. Machinery etc., Naval Station, Puget Sound. Sept. 29
Oct. 19. Levee work, New Orleans, La. ..... Sept. 29
Oct. 19. Asphalt paving, Winnipeg, Man. ..... Sept. 29
Oct. 20. Viaduct over Lick Run, Cincinnati, O. .... Sept. 22
Oct. 21. Levee work, West Memphis, Tenn. ..... Sept. 22
Advertised, Eng. News, Sept. 22 to Oct. 13.
Oct. 21. Dry dock, Algiers, La. ..... Sept. 8
Oct. 22. Bridge, plans and material, Cincinnati, O. . Sept. 29
Oct. 22. Electric plant, Litchfield, Ill. ..... Sept. 29
Oct. 22. Dredging, Pensacola Bay, Fla. ..... Sept. 29
Advertised, Eng. News, Sept. 29 to Oct. 13.
Oct. 23. Plans for sewer system, Chertsey, Eng. .... Sept. 22
Oct. 24. Markets, etc., Belem, Brazil. ..... Apr. 28
Oct. 24. Paving with asphalt, etc., Hamilton, O. .... Sept. 29
Oct. 24. Water-works, Gallipolis, O. ..... Sept. 29
Oct. 24. Heating plant, St. Peter, Minn. ..... Sept. 29
Oct. 25. Jetties, Portland, Ore. ..... Aug. 25
Advertised, Eng. News, Aug. 25 to Sept. 15.
Oct. 26. Bridge bonds, Cincinnati, O. ..... Sept. 29
Oct. 26. Dredging, Newport, R. I. ..... Sept. 29
Advertised Eng. News, Sept. 29 to Oct. 20.
Oct. 26. Cement, broken stone, etc., Newport, R. I. .. Sept. 29
Advertised Eng. News, Sept. 29 to Oct. 20.
Oct. 27. Paving, Camden, N. J. ..... Sept. 29
Oct. 30. School building, Chehalis, Wash. ..... June 18
Nov. 1. Court house, Garner, Ia. ..... Sept. 8
Nov. 1. School building, St. Louis, Mo. ..... Sept. 22
Nov. 7. Improving electric plant, Topeka, Kan. .... Sept. 22
Nov. 10. Water supply, Belem, Brazil ..... Sept. 29
Nov. 15. Water-works addition, Seattle, Wash. ..... Sept. 22
Advertised, Eng. News Sept. 22 to Nov. 10.
Nov. 15. Jail work, San Saba, Tex. ..... Sept. 29
Nov. 21. Government bldgs (8), Sophia, Bulgaria .... Sept. 29
Dec. 31. Plans for station, etc., Stockholm, Sweden. June 23
Jan. 1. City hall plans, Bridgeport, Conn. ..... Aug. 18
Jan. 2. Bridge, Quebec, Que. ..... Sept. 29
Advertised, Eng. News Sept. 29 and Oct. 6.
Feb. 10. Jail building, Keyser, W. Va. ..... Sept. 29
No date. Steam boiler, etc., Lawrence, Kan. ..... Sept. 29

RAILWAYS.

ATKINSON & NORTHERN.—Bids are asked, according to reports, for work on a new line of railway between Atkinson and Perry, Neb., on the Niobrara River, a distance of 25 miles. O. G. Wales, Gen. Mgr., Atkinson.

CALIFORNIA EASTERN.—Press reports state that the California division of this railway company has placed an issue of $684,000 of 5% bonds in London, for the purpose of extending its lines to Calivada, Nev., a distance of 47 miles. The present line is operated between Blake and Manvel, Cal., a distance of about 30 miles. R. S. Seibert, Gen. Mgr., Los Angeles, Cal.

CHICAGO, MILWAUKEE & ST. PAUL.—D. J. Whittemore, Ch. Engr., 1100 Old Colony Bldg., Chicago, Ill., informs us that this company has no intention of building a line this year from Linn to Stanley, Wis., a distance of about 35 miles.

COAHUILA CENTRAL.—The Coahuila Central Construction Co. has been awarded the contract for the construction of this proposed line from Saltillo to Trevino, Mexico, a distance of 60 miles. The construction company, of which W. E. Dorwin is president, and John C. McMynn purchasing agent, both of Chicago, Ill., will also build a hotel at Saltillo and a smelter, with a capacity at first of 600 tons. The railway company was incorporated at Saltillo, June 30, to construct a standard-gage railway, with officers as follows: Pres., S. J. Martin, Saltillo, Mex.; Vice-Pres., John C. McMynn, The Rookery, Chicago; Secy. and Treas., E. W. Stone, Oswego, N. Y.; Gen. Mgr., W. E. Dorwin, Chicago.

COAL RIVER & SOUTHWESTERN.—This company was incorporated in West Virginia, Sept. 19, with a capital stock of $1,500,000, to construct a steam railway from St. Albans to the Norfolk & Western R. R. in Mercer county, W. Va. The incorporators are: James Booth, H. J. Tondy, C. R. Troxbr, W. S. Booth and H. F. Tondy, all of Huntington, W. Va.

EAST LOUISIANA.—We are informed that nothing has yet been done towards the construction of the proposed extension of this line from Covington north to the state line, about 36 miles. John Poitevent, Pres.; E. S. Ferguson, Asst. Gen. Mgr., both of New Orleans, La.

ENGLAND.—Bids are asked by the Burma Railways Co. until Oct. 3 for a number of "F" class engines, duplicate parts of locomotives, and metallic fittings for carriages. Address the company, at 76 Gresham House, Old Broad St., London, E. C., England.

IOWA CENTRAL.—L. M. Martin, Ch. Engr., Marshalltown, Ia., informs us that no extension from Oskaloosa to Des Moines, Ia., has been authorized, nor will any other extensions be made this year. Press reports state that a 3-mile branch was to be built from Albia, Ia., south to new coal fields.

KANSAS CITY, OSCEOLA & SOUTHERN.—J. F. Hinckley, Ch. Engr., Bolivar, Mo., informs us that this line was completed Sept. 1, and is being operated under lease by the St. Louis & San Francisco R. R. Co., which also operates the old line from Osceola to Kansas City. Construction began about Jan. 1 from the terminus of the "Blair Line" at Osceola, and extended to Bolivar, via Vista, Gerster, Weaubleau, Flemington and Cliquot, Mo., a distance of 38.3 miles. Pres., C. Miller, Bangor, Pa. The contractors for the grading and bridge and masonry work were George S. Good & Co., of Lock Haven, Pa., who moved approximately 700,000 cu. yds. of material and erected 5,000 lin. ft. of pile and frame trestle bridge work, 2,000 cu. yds. of culvert masonry and 700 cu. yds. of bridge masonry.

KOREA.—Press reports state that an agreement has been signed at Seoul, Korea, for the construction by Japanese of a railway from Seoul to Fusan.

LEAVENWORTH, KANSAS & WESTERN.—Reports state that a steam ditching machine is at work on this road; also that the roadbed is to be relaid with steel rails. J. O. Brinkerhoff, Act. Gen. Mgr., Kansas City, Mo.

LITTLE RIVER VALLEY.—Track is said to have been laid on the new line from Morris Ferry, Ark., on the Texarkana & Fort Smith branch of the Kansas City, Pittsburg & Gulf R. R., to the state line 7 miles west; grading is in progress. The projected route is from Nashville to Neal Springs, via Howard and Sevier, a distance of 40 miles. Pres., D. C. Richardson, Horatio, Ark.

MANISTIQUE & NORTHWESTERN.—C. E. Kelso, Secy., Manistique, Mich., informs us that Swanson & Wick, of Manistique, have been awarded the contract for grading for an extension of this system from Scotts to Shingleton, Mich., a distance of 8 miles, and that the work is almost completed. About five miles of track has been laid by the company employees, and connection is expected to be made with the Duluth, South Shore & Atlantic Ry. at Shingleton within 20 days. A connection was made with Munissing R. R. at Ackers on Sept. 15. The company will soon control 53 miles of railway in operation between South Manistique and Ackers and Shingleton. Pres., A. J. Fox, Detroit, Mich.; Gen. Mgr., Geo. H. Orr, Manistique.

MARSHFIELD & SOUTHEASTERN.—Chas. H. Grundy, Gen. Mgr., Marshfield, Wis., informs us that no new work on this line is under way, but that the proposed extension from Nekoosa to Princeton, Wis., about 50 miles, is still under consideration. Pres., W. A. Scott, Chicago, Ill.

MEXICAN CENTRAL.—Reports state that this company will soon require considerable track material, as arrangements have been made to build a branch line from Oredain to Tequila, State of Jalisco, a distance of about 30 miles. It is said that the landed proprietors along the route have given the company free right of way and a cash subsidy of $30,000. The company is now building a branch from Jiminez, State or Chihuahua, to Parral. It is also reported that negotiations are being made for the purchase of the Yurecuaro and Zamora division of the Michoacan & Pacific R. R., at present under construction.

NATIONAL INTEROCEANIC, ISTHMUS OF TEHUANTEPEC.—Press reports again state that Pierson & Sons, of England, have leased this railway system, and will reconstruct the entire roadbed; also that the Mexican government will make a harbor at Coatzacoalcos on the Atlantic side of the Isthmus. O. G. Canton, Ch. Engr., Coatzacoalcos, Vera Cruz, Mex.

NEVADA.—Final arrangements have been made, according to reports, for the construction of a line of railway from the smelters in Golconda, Nev., to the copper mines, a distance of 11¾ miles. Orders have been placed for 33,000 ties and the necessary rails and equipment.

PECOS VALLEY & NORTHEASTERN.—Track is being laid on this line between Roswell, N. Mex., and Amarillo, 205 miles, at the rate of over one mile a day, and the work is expected to be completed by Dec. 15. The grading west of the Pecos River has been completed.

PHILADELPHIA & READING.—Reports state that the contract for constructing a 1¼-mile extension of this line at Shippensburg, Pa., to a connection with the Western Maryland R. R., has been let to Smith & Campion, Mahoney City, Pa. This new road will be built in order to avoid heavy grades now met with in that vicinity.

PITTSBURG & LAKE ERIE.—In addition to the proposed introduction of a complete electrical block signal system on this railway, plans are said to have been approved and bids asked for interlocking switch systems at the Pittsburg terminals and at the Bellevernon Junction bridge, which is being improved and extended at an expenditure of $100,000. The larger plant will be at the Pittsburg passenger terminals, and is estimated to cost $20,000. The apparatus will be electro-pneumatic and will have 40 levers to be operated. This company has just completed the laying of new 90-lb. steel rails to displace 70-lb. rails. Twenty miles have been put down on the northbound track, and next season both tracks between Pittsburg and Youngstown will have these rails. Between the city and Youngstown the roadbed has been made of a uniform cross-section and is ballasted with slag. J. A. Atwood, Ch. Engr., Pittsburg, Pa.

PITTSBURG, JOHNSTOWN, EBENSBURG & EASTERN.—The contract for the construction of the Altoona terminal of this line from Chestnut Ave. and 9th St., in Hollidaysburg, Pa., to a point on the road above Coleman's, has been awarded to E. M. Wilkins, who is expected to commence work on the same before Oct. 1. Other contracts on that road have been let.

PONTOTOC & STARKVILLE.—It is announced that the supervisors of Chickasaw county, Miss., have contracted with this company to grade, cross-tie, bridge and trestle 13 miles of roadbed from Houston north to the Pontotoc county line. This company was incorporated in Mississippi, as stated in our issue of July 7, to build a line from Pontotoc to Starkville, via Algona, Houlka, Houston and Sparta, Miss., a distance of 60 miles. Pres. N. B. Crawford, Atlanta, Miss., or N. W. Bradford, of Houston, Miss., may be addressed.

POTOSI & RIO VERDE.—Chas. J. Nourse, Jr., 27 William St., New York, a director of this company, whose incorporation was noted in our last issue, informs us that this proposed steam railway will extend from San Luis Potosi, Mexico, in a southeasterly direction into the Rio Verde district, and that the gage will be 36 ins. Capital for construction has been secured, and 40 miles are now under construction by the Potosi & Rio Verde Construction Co. One-half of the grading has been completed, and all the rails and ties purchased. Pres., Robert S. Towne, 27 William St., New York.

SOUTH CAROLINA & GEORGIA EXTENSION.—Reports state that this company has been chartered, with a capital of $500,000, to construct a railway from the southern boundary of North Carolina to the Tennessee State line, via Marion, S. C., a distance of about 140 miles. Among those interested are: John J. Collier and Evan R. Dick, both of Philadelphia, Pa., and Samuel Hunt., Pres. Ohio River & Charleston Ry. Co., Cincinnati, O.

SOUTHPORT & TERMINAL.—This company was incorporated in North Carolina, Sept. 13, with a capital stock of $250,000, to construct and operate a railway from Southport to Wilmington, N. C., with the right to extend the road from Southport, in a westerly direction, through the county of Brunswick to the boundary line between North and South Carolina. The directors are: W. A. Cullen, Conrad Kirk, Henry McDougal, P. Murray, Thomas Hawkins and H. H. Dougherty, of Newark, N. J.; Geo. H. Bellamy, El Paso, N. C.; Franz Mayer, C. C. Brown and A. Vorhees, New York.

UTAH & PACIFIC.—W. D. Hendricks & Son, Richmond, Utah, were awarded the contract, Sept. 17, for constructing the first 75 miles of this line from Milford, Utah, south to the Nevada state line, on the old grade built by the Oregon Short Line R. R. Co. Other bidders were: Holt & Reese and Kimball & Lewis, Salt Lake City, Utah; Roylance & Thompson, of Springville, Utah; C. Erickson & Co., of California; T. W. Stewart and the Corey Bros. Co., of Ogden, Utah. The Colorado Fuel & Iron Co. was awarded the contract for furnishing all necessary bolts, spikes and fastenings. The work of construction was expected to begin within 15 days and to be completed within three months. An extension of the road beyond Stateline as far as Pioche, Nev., is said to be projected. Pres., A. W. M'Cune, Salt Lake City; Ch. Engr., Joseph A. West, Ogden, Utah.

WABASH.—W. S. Lincoln, Ch. Engr., St. Louis, Mo., informs us that no official information has yet been received regarding the proposed extension of this line from East Hannibal to Quincy, Ill., as stated in current reports.

WEST VIRGINIA.—It is reported that J. W. Everhart, formerly surpervisor of track on the West Virginia Central & Pittsburg Ry., will supervise the construction of a short line of railway, an incline plane and a tram-road at Simpson, W. Va., for the New York Coal Co., which owns 1,100 acres of big vein gas coal. Col. Thomas B. Davis, Keyser, W. Va., is connected with the company.

WYOMING & MISSOURI RIVER.—Geo. M. Nix, Pres., Belle Fourche, S. Dak., informs us that this line is again under construction, between Belle Fourche and Aladdin, Wyo., a distance of 18 miles, and work will be completed by Oct. 15. F. C. Tucker, Ch. Engr., Deadwood, S. Dak.

YORK SPRINGS.—M. B. Cumbler, Pres., Carlisle, Pa., informs us that the surveys have been made and the right of way obtained for this proposed railway from York Springs to Dillsburg, Pa., a distance of about nine miles. C. W. Webbert, Ch. Engr., Boiling Springs, Pa.

STREET AND ELECTRIC RAILWAYS.

BERLIN, N. H.—Carlos P. Day, a director of the Berlin Electric Ry. Co., of Berlin, informs us that this company has not yet elected officers, but that a charter has been obtained and capital stock subscribed. As stated in our last issue, this company proposes to construct four miles of line between Berlin and Gorham.

BURLINGTON, VT.—Elias Lyman, Pres. Burlington Traction Co., of Burlington, informs us that the right of way has all been obtained, and the necessary capital secured, for constructing a 1¼-mile extension of this line over the lower road in this city. The company will do its own work. H. M. McIntosh, Ch. Engr., Burlington.

DEDHAM, MASS.—The Norfolk Western St. Ry. Co. received a charter of incorporation, Sept. 23, and also permission from the railway commissioners to build and operate its proposed electric railway on High St., Dedham. The proposed route of the completed line is from Dedham to Medfield, via Westwood, a distance of nine miles. Work is expected to begin soon. Pres., W. H. Mitchell, Medfield; Engrs., Hodges & Harrington, 60 State St., Boston.

PALMER, MASS.—The Palmer & Monson St. Ry. Co. is said to contemplate the extension of its lines through Palmer, Ware and Warren, in which places franchises have been applied for.

SOMERVILLE, MASS.—The aldermen have granted the Boston Elevated Ry. Co. the right to relocate its tracks on Summer St.

WHITMAN, MASS.—G. H. Pearson, Town Clk., informs us that at the town meeting, on Sept. 23, a franchise was granted to the Brockton & Whitman St. R. R. Co. The contract will probably be let as soon as franchise is obtained in Brockton.

MOUNT VERNON, N. Y.—The trustees of the village of North Pelham have granted a franchise to the Westchester Electric Co. to build a street railway through the village.

NEW HARTFORD, N. Y.—The trustees of this town, Sept. 21, granted a franchise to the Sanquoit Valley Electric St. R. R. Co. to construct a street railway between New Hartford and Utica. Pres., A. P. Seaton.

NYACK, N. Y.—Local reports state that Isaac A. Walker & Son, 1217 to 1219 Girard Bldg., Philadelphia, Pa., have the contract for building the proposed electric street railway of the Nyack Traction Co., and that about 800 men will be employed on the work. The plans and specifications are now said to be in course of completion. Pres., H. C. Howard, Media, Pa.

PENFIELD, N. Y.—A hearing will be given in this town by Henry C. March, Comr. of Highways, Sept. 30, on the application of the Rochester & Sodus Bay Ry. Co. for a franchise to build through Penfield. The company has been granted permission to build along the Ridge Road through Webster. The proposed route of the railway is from Webster to Sodus Point, a distance of 42 miles. Pres., Thos. J. Nicholl, 267 State St., Rochester, N. Y.

PORT CHESTER, N. Y.—The Port Chester St. Ry. Co. filed a certificate of extension of its lines, Sept. 24, one beginning on Main St., running easterly to the State line; the other beginning on Purchase Ave., at Elm Place, and running westerly to the Glenbrook Road.

WATERTOWN, N. Y.—It is reported that the Black River Traction Co. has purchased the plant of the Watertown Brass Co., on Newell St., and that it will soon let contracts for the building of a new power house on the site. Treas., B. B. Taggart, Watertown.

CRANFORD, N. J.—The township committee of Cranford granted a franchise to the Elizabeth & Westfield St. Ry. Co., Sept. 22, to build a trolley line through the town. The company now holds franchises from all the towns between Elizabeth and Plainfield, except through Roselle. Pres., A. A. Gaddis, Westfield, N. J.

JERSEY CITY, N.J.—It is reported that the North Jersey St. Ry. Co., Newark, will build an extension on Jackson Ave., in this city, this fall. David Young, Gen. Mgr.

PERTH AMBOY, N. J.—A new application has been made to the board of aldermen by the Perth Amboy & Sewaren Electric St. Ry. Co. for a franchise to enter the city over Railroad Ave.

PLAINFIELD, N. J.—A public hearing will be given by the council, Oct. 3, on the application of the Plainfield St. Ry. Co. for permission to extend its tracks. Pres., T. N. Nevins.

BANGOR, PA.—A local company is being organized, according to reports, for the construction of an electric railway between East Bangor, Bangor and Pen Argyle.

BUTLER, PA.—The construction of a street railway in this place is said to be wanted by the residents.

CHESTER, PA.—The trolley line now being built between Chester and Wilmington, Del., is expected to be completed by Oct. 1. The new road completes the trolley connection from Philadelphia and New Castle, Del. a distance of 35 miles. Pres., C. W. Clark, Philadelphia, Pa.

BALTIMORE, MD.—The Anne Arundel county commissioners have granted permission to the Baltimore, Marley & Mountain Ry. Co. to construct a line over Curtis Creek and Cabin Branch bridges. The company was recently incorporated with a capital stock of $50,000, to build an electric railway from Baltimore to the mouth of the Magothy River, a distance of 11 miles. The incorporators are: Jas. Bond, Baltimore; Walter R. Townsend, Baltimore county; Robt. Moss, Frank B. Hancock, Bruner R. Anderson, Dr. Elijah Williams, and others, of Anne Arundel county.

LAUREL, MD.—Mayor Phelps and others are said to be interested in the construction of a proposed electric railway to connect Laurel and Savage, via the old Washington & Baltimore turnpike.

WASHINGTON, D. C.—J. D. Croissant, Pres. Washington & University R. R. Co., 821 North Carolina Ave., Washington, informs us that surveys have been made and most of the right of way obtained for this proposed electric railway, from Washington to Glen Echo, via University Heights and University Park, a distance of three miles, with a three-mile extension into Maryland. The capital for construction has not yet all been secured, but 6% bonds will be issued this winter. The charter must be amended by Congress before contracts will be let and work commenced. V. K. Nash, Ch. Engr., Woonsocket, R. I.——Press reports state that the Capital Traction Company is getting together the material preparatory to changing the Love underground system on U St., to the General Electric system, in use on the remainder of its line, next spring. The road for 1¼ miles will practically have to be rebuilt. It is probable that the underground system will replace the overhead trolley as far as the eastern end of the Cincinnati St. bridge over Rock Creek.

CLEVELAND, O.—Frank De H. Robinson is said to contemplate the construction of a complete new system of street railways in and about Cleveland.

CONNEAUT, O.—We are informed that surveys are about completed and most of the right of way obtained for the proposed electric railway of the Pennsylavia & Ohio Ry. Co. from Painesville to Conneaut, O., a distance of 42 miles. The capital for construction has not yet all been secured, but contracts will probably be let before Jan. 1. The engineering work is being done by the Osborn Co., Osborn Bldg., Cleveland.

DAYTON, O.—Reports state that work began on the construction of the proposed Dayton, Springfield & Urbana Electric Ry. Sept. 19, at Dayton; estimated cost, $600,000. Engr., W. G. Moler.

SOUTH BEND, IND.—The council of Mishawaka granted a franchise to the South Bend & Elkhart Electric Ry. Co. Sept. 19, which proposes to construct an electric line from South Bend to Goshen, via Mishawaka, Elkhart and Osceola, 13 miles. Reports state that Messrs. Delworth and Kennedy, owners of this new system, have bought the Indiana Electric Co.'s lines in Elkhart and connecting Elkhart and Goshen. Other extensions are also contemplated.

ALTON, ILL.—J. F. Porter, Pres. Alton Ry. & Illuminating Co., Alton, informs us that this company proposes to build from Alton to East Alton, through 6th St. and the cemetery, a distance of 5 miles. Contracts will be let early in next year for rails, ties, bonds, macadam, five cars with single trucks, three cars with double trucks, and one 100-K-W. power generator. All steam machinery is now in place.

CHICAGO, ILL.—It is announced that the Northwestern Elevated R. R. Co. will resume work soon to finish its uncompleted system. The Columbia Construction Co. erected over four miles of the structure in 1896, when work had to be suspended for want of sufficient capital.

EDWARDSVILLE, ILL.—H. Renecke, Clk. of Madison county, of Edwardsville, informs us that the Mississippi Valley Ry. Co. has secured the right of way from the county, and most of the towns along the route, and that surveys are now in progress. One route is from St. Louis to Edwardsville and thence to Alton, via East St. Louis, Collinsville and Glen Carbon; another from St. Louis to Alton, via East St. Louis, Brooklyn, Venice, Madison, Granite City, Oldenburgh, East Alton and Upper Alton, a distance of about 60 miles. Contracts will probably be let next February. Pres., Chas. E. Carroll; Vice-Pres., John A. Mehling; Secy. and Treas., August Holthaus, 1449 North 6th St., St. Louis, Mo.

ST. LOUIS, MO.—The Electric Connecting Ry. Co., of St. Louis, has been incorporated with a capital stock of $2,000 by John H. Bobring, M. T. Chestnut and Jas. D. Houseman, Jr.

PORT ANGELES, WASH.—E. W. Chillis, Erie, Pa.; John Cain and Geo. H. Clementson, of Port Angeles, are said to have applied to the council Sept. 15 for a franchise to construct a street railway through this place.

BINGHAM, UTAH.—The Highland Boy Mining Co. expects to build 12,700 ft. of tramway between the mine and the yards of the Rio Grande Western at Bingham. Mgr., Thomas Weir.

MONTREAL, QUE.—F. L. Wanklyn, Mgr. and Ch. Engr. Montreal St. Ry. Co., of Montreal, informs us that this company has commenced the construction of an extension of its line as far as Pine Ave. A further extension to the city limits near the top of Côte des Neiges Hill is under consideration.

PETERSBORO, ONT.—Reports state that the Petersboro & Ashburnham St. Ry. has been sold to Arthur Stevenson, and that some improvements will probably be made.

ST. CATHERINES, ONT.—Press reports state that Haines Bros., of New York, has bought the Niagara Central Ry., and that they will equip it with electricity and establish a new service between St. Catherines and Niagara Falls. The roadbed will be changed and several trestles abandoned.

ELECTRIC LIGHT AND POWER.

LANCASTER, N. H.—We are informed that the plant of the Lancaster & Jefferson Electric Co., recently incorporated, is nearly completed.

SOMERVILLE, MASS.—The question of a municipal plant is again being considered. Alderman Lamont may be addressed.

PROVIDENCE, R. I.—The Narragansett Electric Lighting Co. has been awarded the contract for laying conduits for its wires to the American Vitrified Conduit Co., New York, N. Y. The contract will call for the laying of conduits in about 20 miles of streets, in which will be placed about 175 miles of ducts. The cost of laying the conduits will be about $250,000 and that of furnishing and drawing the wires about $250,000.

MYSTIC, CONN.—The Hyer-Sheehan Electric Motor Co., Newburg, N. Y., is reported to have been awarded the contract for furnishing and installing the machinery for the proposed plant for the Mystic Electric & Gas Light Co., at about $25,000. Engr., Thos. C. Perkins, Hartford, Conn.

AKRON, N. Y.—At a recent meeting of the board of trustees it was resolved to call an election for Oct. 10 to vote on the question of an appropriation of $3,000 to install an electric light plant.

CAZENOVIA, N. Y.—Jno. O'Connell, Marathon, N. Y., writes us that the Fairchild Mill property has been leased for a term of years. The installation of a plant with a capacity of 300 16-c. p. lights is about to commence. The contract for the equipment, to cost about $7,000, has been made.

CHARLOTTE, N. Y.—Bids are asked until October 15 for constructing a plant and water-works, as described in our advertising columns. Consult. Elec. Engr., C. O. Mailloux, 150 Nassau St., New York; Pres. Bd., Jno. M. Allen.

HERKIMER, N. Y.—An election will be held Oct. 10 to vote on the question of issuing $13,000 in bonds for a municipal plant, according to reports.

HUDSON, N. Y.—Press reports state that Charles J. Cooper, Brooklyn, N. Y., who recently purchased the Hudson Street Ry., has closed negotiations by which he also becomes sole owner of the plant and franchise of the Hudson Electric Light & Power Co. The consideration is $150,000.

LOWVILLE, N. Y.—The Wetmore Electric Co. is reported to have awarded the contract for a 230-HP. dynamo to the Westinghouse Electric & Mfg. Co., Pittsburg, and that for a 27-in. McCormick water-wheel to the S. Morgan Smith Co., York, Pa. If the demand for electricity warrants it, three dynamos and three wheels will be placed at the Beaver River Falls. The distributing station will be located on the farm of W. L. Babcock, east of the corporation limits of Lowville.

PATCHOGUE, L. I., N. Y.—Press reports state that the Patchogue Electric Light Co. is about to extend its lines from Patchogue through Blue Point, Bayport and Sayville. To meet the expense of the extension the capital stock of the company will be increased from $20,000 to $30,000. The company will also erect a new brick plant at the bank of the Patchogue River and add a 1,000 HP. dynamo and other improvements. Pres., J. S. Havens.

ROCHESTER, N. Y.—Bids are asked until Oct. 3 for electric lighting of the Free Academy building for one year from Nov. 1. Chn. Com., J. F. White, Bd. of Education.

UTICA, N. Y.—Johnson & Morton, 26 Catherine St., Utica, have been awarded the contract for placing a plant in the Broad St. works of the Savage Arms Co.

WATERTOWN, N. Y.—A report states that the aldermen are considering the question of a municipal plant or of renewing the contract with the Watertown Electric Light Co., with a provision that the city have the right to purchase the plant. It is probable that the contract will be renewed. Cy. Engr., C. O. McComb.

WHITESBORO, N. Y.—The council is considering propositions for street lighting from the Utica Electric Light Co. and the Welsbach Lighting Co. of America.

CAMDEN, N. J.—The lighting committee has directed City Clerk Kramer to communicate with cities owning their plants with a view to securing information for a municipal plant for this city.

AVOCA, PA.—The new owners of the Standard Electric Light, Heat & Power Co., it is stated, will improve the plant. Pres., W. H. Hollister, Avoca; Secy. and Treas., J. B. Russell.

BRADFORD, PA.—Benj. W. Brundred and Stanley W. Loomis, Oil City, Pa., have applied for a franchise for a plant. Action will not be taken for some time. Cy. Clk., Jas. A. Lindsey.

DARBY, PA.—J. F. Willy, Clk., writes us that the plans for the proposed plant are still under consideration by the council.

LEBANON, PA.—The contract with the Edison Electric Illuminating Co., of Lebanon, for arc lights, will terminate on June 1, 1899, and the city is about to take steps looking to obtaining bids for 125 arc lights, for a period of from five to ten years. William D. Zehnder, Lebanon, should be addressed. Cy. Engr., George W. Hayes.

MOUNT JOY, PA.—T. E. Bailey & Co., for the Manheim Electric Light, Heat & Power Co., have secured the franchise for lighting this place.

BALTIMORE, MD.—Bids are asked until Oct. 8 for furnishing and installing a plant for the new courthouse in this city. Archs., Wyatt & Nolting, 4 East Lexington St., Baltimore; Chn. Courthouse Com., Felix Angus.

RICHMOND, VA.—It is stated that T. C. Thompson, Supt. Fire Alarm Service, is investigating the cost, etc., of a plant for the almshouse.

GREENSBORO, N. C.—The Industrial & Immigration Association has voted to urge the council to arrange at once for a new contract for electric lighting of the city from Jan. 1, 1899, by asking for bids, and also for granting a franchise for a street railway.

DALTON, GA.—We are informed that at the election Nov. 2 this place will vote on the question of issuing $70,000 in 30-year 6% bonds for a plant and a sewerage system. Engr., J. L. Ludlow, Winslow, N. C.; Mayor, W. H. Pruden.

CRESCENT CITY, FLA.—C. H. Cash and W. J. Pierpont have applied for franchises for lighting plants.

FLORENCE, ALA.—It is stated that the Florence Milling Co. proposes to put in an electric plant at its mill.

PENSACOLA, FLA.—The bureau of yards and docks, U. S. N., Washington, D. C., received but one bid, that from the McCay Engineering Co., Baltimore, Md., at $12,886, for furnishing and installing a plant at the nevy yard. The bid is in excess of the appropriation of $10,000.

COVINGTON, KY.—Alderman Schlosser has introduced an ordinance creating a fund for the erection of a city plant to cost about $42,000.

FERDINAND, IND.—It is reported that this place is to have a plant.

THORNTOWN, IND.—The question of building a plant and water-works is being considered.

DECATUR, MICH.—The following bids were received Sept. 6 for building a plant, the bids for the poles and wire being given under Contract Prices; Engr., Geo. S. Pierson, Kalamazoo, Mich.: (1) being for power station building; (2) for boilers; (3) for engine; dynamos—(4) for two 30 K-W.; (5) for one 30 K-W.; (6) for 50 K-W.; (7) for 23 arc lamps: Carney & Hartsell, Decatur, (1) $985, (2) $325 setting only; (4) $35 setting only; Daniel Carney, Sr., (1) $950, (2) $315 setting only, (4) $35 setting only; Westinghouse Electric & Mfg. Co., Pittsburg, (2) $1,585; (3) $963; (4) $1,675; (5) $875; (6) $1,090; (7) $525; Fort Wayne Electric Corporation, (2) $1,522; (3) $1,116; (4) $1,450; (6) $1,275; (7) $440; General Electric Co., Schenectady, N. Y., (4) $1,677; (5) $869; (6) $1,061. 45 K-W.; (8) $438; Ridgway Dynamo & Engine Co., Ridgway, Pa., (3) $1,025; (6) $1,178; Thos. Muir & Son, agent, 31 Larned St., W., Detroit (Card Electric Co., Mansfield, O.,) (4) $1,186; (5 and 6) $1,438 together; (7) $470; add $265 for installation of generators and switchboards, price for wire, f. o. b., Decatur, 14¼ cts. a lb.; (Sprague Electric Co.). (4) $1,220, 33 K-W.; (5 and 6) $1,485, one 33 K-W. and one 48 K-W.; (Warren Electric Mfg. Co., Sandusky, O.,) (5) $670; (6) $795. 45 K-W., and $986, 60 K-W; New York Safety Steam Power Co., 30 Cortlandt St., New York, (2) $1,500; (3) $1,000; Wray-Austin Machinery Co., Detroit, (3) $1,035 and $1,215; Pearl & Mills, agents, Benton Harbor, Mich., (Fort Wayne Electric Corporation) (4, 5 and 6) $4,750. $4,100 and $4,400 respectively, lump bids including 1, 2, 3 and 7; also same with following bids: (Westinghouse Electric Mfg. Co.,) (5) $4,100, (6) $4,450; (General Electric Co.,)

(4) $5,250; (5) $4,450; (6) $4,650; (Western Electric Co.,) (4) $5,150; (5) $4,350; (6) $4,650; add $150 for direct-connected dynamo; add $250 for special boiler. It is stated that the contracts were let to J. W. Pearl and Geo.. Mills, Benton Harbor, at about $7,000.

GRAND RAPIDS, MICH.—The Chase Construction Co., Detroit, has been awarded the contract for furnishing the materials and for building the proposed city plant at $80,970. The bids will probably be given next week. Engrs., Nagle & Ball, Chicago, Ill.

MOUNT PLEASANT, MICH.—Chas. M. Brooks, mayor, writes us that this place voted Sept. 21 against issuing bonds for a plant and water-works.

LITCHFIELD, ILL.—Bids are asked until Oct. 22 for furnishing electric lights, and for constructing a plant. Cy. Clk., O. D. W. Gooch.

UPPER ALTON, ILL.—The Alton Ry. & Illuminating Co has been awarded a 5-year electric lighting contract, according to reports.

EAU CLAIRE, WIS.—The committee has recommended that the council grant a franchise for an electric lighting plant to David Douglas. Chn. Com., F. Gregoire.

ADA, MINN.—Fred. Hampson, it is stated, proposes to put in a plant.

WICHITA, KAN.—Councilman W. H. Herbig writes us that bids will probably be received within 30 days for the proposed plant for H. B. Church & Co. Mr. Church was in Chicago Sept. 19 negotiating for the construction of the plant in connection with the building of a street line. The plant will have a capacity for furnishing 175 2,000-c. p. arc lights; the number of incandescent lights is not known.

WAHOO, NEB.—S. H. Jones, owner of the electric plant, writes us that he is repairing the burned portion of the plant. In the near future a new engine and dynamo will be put in.

ANACONDA, MONT.—It is stated that arrangements are being made for completing the Big Hole power plant of the Montana Power Co. Work was suspended June 1 by a heavy rise of water which threatened the new structure. The dam is 500 feet wide, and is to supply electric power for Butte and vicinity. Col. T. C. Marshall, Missoula, Mont., may be addressed.

CASSVILLE, MO.—The question of building a plant and water-works is being considered, according to reports. Mayor, Harrison Horine.

ST. LOUIS, MO.—The St. Louis Automatic Refrigerating Co. has applied for permission to build a power plant on the wharf at Dickson St. Pres., Jas. E. Baker.

SAN ANGELO, TEX.—The San Angelo Water-Works Co. has filed an amendment to its charter for the purpose of supplying light, heat and power.

SHERMAN, TEX.—Jno. E. Kern, County Surv., writes us that the contract for building the plant has been let.

GALLUP, N.MEX.—It is stated that this city wants to put in a municipal plant. The citizens object to the private ownership of the plant.

BREMERTON, WASH.—Bids are asked until Oct. 15 for installing a plant at the U. S. naval station, Puget Sound, Bremerton, Wash., for which $9,800 is appropriated. M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C.

LAKE VIEW, CAL.—C. G. Baldwin, of Claremont, Cal., has filed on 125 inches of water flowing into Mill Creek near its source, with which to generate electricity to be used at Lake View, Perris, Menifee, Elsinore and neighboring towns.

REDWOOD CITY, CAL.—The question of building an incandescent plant in connection with the city arc light plant is being considered by the board of trustees.

SANTA BARBARA, CAL.—At the request of Mayor Burke a committee has been appointed to investigate the question of building a plant to cost about $12,000.

BROCKVILLE, ONT.—The "Times" is urging the town to consider the question of securing electric power from Jones Falls, near Smith's Falls, a distance of about 30 miles.

ORILLA, ONT.—John Kennedy, Ch. Engr., Harbor Comrs., Montreal, Que., is stated to have submitted a report in favor of securing electric power from a waterfall several miles from this place.

SANTIAGO, CUBA.—Press reports state that private parties are negotiating for the construction of a plant.

RATHMINES, IRELAND.—Bids are asked until Oct. 5 for furnishing a plant for this city. Engr., Robt. Hammond, 64 Victoria St., London, S. W.; Secy. Comrs., F. P. Fawcett.

NEW COMPANIES.—Empire Heating & Lighting Co., St. Louis, Mo., $5,000; S. L. Cohen, J. S. Costella, J. C. Robertson.

BRIDGES.

CAMBRIDGE, MASS.—Bids are asked until 12 m., Oct. 1 for constructing a temporary pile bridge over the Charles River, near the West Boston bridge. Josiah Quincy, Chn. Comn.

HARTFORD, CONN.—Geo. Nevero, Clk., informs us that no action other than to apply to the railroad commissioners for plans for a bridge over the tracks at Broad St., has been taken.

LIVINGSTON MANOR, N. Y.—The question of issuing $5,000 of bridge and road bonds will be submitted to a special election.

NIAGARA FALLS, N. Y.—The council is considering the question of overhead bridges at the railroad crossings on Main, Sixth and Pine Sts.

PITTSFORD, N. Y.—Geo. A. Gass, Supt. and Secy. Erie Canal Co., Pittsford, writes us that plans are being prepared for a bridge 80 ft. long and 66 ft. wide, on stone abutments; estimated cost, $18,000. Bids will be asked in October by Geo. W. Aldridge, Supt. Pub. Wks., Albany.

PERTH AMBOY, N. J.—The board of freeholders will begin preparations for a bridge across Woodbridge Creek, at Railroad Ave., at the next meeting.

LANDENBURG, PA.—The Schuylkill Bridge Wks., Phoenixville, Pa., has been awarded a contract for the construction of an iron bridge over White Clay Creek.

WILMINGTON, DEL.—The Edge Moor Bridge Works has been awarded contracts for bridge work as follows: Three bridges, to be built on the Cleveland & Pittsburg division of the Pennsylvania R. R.; two viaducts, to be built on the Lehigh Valley R. R.; one bridge, to be built on the Central R. R. of New Jersey, and two bridges, to be built on the Pennsylvania subway of the Pennsylvania R. R., according to reports.

NEWPORT NEWS, VA.—The Structural Iron Co., Baltimore, has submitted the lowest bid for constructing bridges at 25th and 34th Sts. and Chesapeake & Ohio R. R.; appropriation, $40,000.

CONCORD, N. C.—Bids are asked by the county commissioners for constructing a new bridge at Black's Mills.

ATLANTA, GA.—Reports state that the Atlanta & West Point R. R. Co. will construct five bridges and a tunnel. George C. Smith, Pres.

HAZLEHURST, MISS.—Bids are asked until Oct. 3 for the construction of two iron bridges, one at Rockport and at Georgetown, Miss., over the Pearl River; estimated cost, $15,000. J. D. Dampeer, Clk. County Supervisors.

CONCORD, TENN.—It is reported that Neely & Smith, Chattanooga, have been awarded a contract to construct several masonry culverts, on the Southern R. R., between Knoxville and Chattanooga.

CALIFORNIA, O.—The water-works commissioners, Cincinnati, have received the lowest bid from the Pittsburg Bridge Co., at $22,000, for the superstructure, and J. Delaney, at $4,850, for the masonry, for a bridge to be built at the water-works pumping station. The bids have been rejected.

CHILLICOTHE, O.—The contract for the superstructure of the bridge over Deer Creek has been awarded to the Iron Superstructure Co., Columbus, O. H. S. Adams, County Audr.

CINCINNATI, O.—Bids are asked until Oct. 26 for the purchase of $90,000 of 4% bridge bonds. Henry Korb, Pres. County Comrs.

CINCINNATI, O.—The county commissioners have awarded a contract for the erection of a bridge over Mill Creek, on Riddle Road, to the Brackett Bridge Co., Cincinnati.

CINCINNATI, O.—Bids are asked until Oct. 22 for furnishing plans and material and constructing a wrought-iron truss bridge, in Sycamore township. E. L. Lewis, County Audr.

LORAIN, O.—L. A. Fauver informs us that $175,000 in bonds have been sold for the construction of a draw bridge across the Black River at Erie Ave., to have a 120-ft. clear opening. The Osborn Engineering Co., Cleveland, O., is preparing plans. Address the county commissioners, Elyria, O.

PONTIAC, ILL.—Bids are asked until 12 m., Oct. 5, for constructing a bridge about 150 ft. long over the Vermillion River, as stated in our advertising columns. F. W. Winkler, Cy. Atty.

ELKHORN, NEB.—The Canton Bridge Co., Canton, O., has been awarded a contract, at $4,600, for constructing a county bridge over the Elkhorn River.

OMAHA, NEB.—Andrew Rosewater, Cy. Engr., writes us in regard to the proposed viaducts ordered by the city council to be built, as noted in Engineering News, that under the provisions of the Omaha city charter, requiring railway companies to construct viaducts required by public travel over their line of railway, the Engineering Department of the city is required to make plans and specifications for such work, and after such plans and specifications are approved by the mayor and city council, the railway companies will be officially notified to proceed with the construction of the same. The viaducts will be paid for by the railway companies and constructed by them. They will, doubtless, under joint arrangement, solicit bids for such construction. The city has nothing to do with receiving bids for this work, unless the companies shall refuse to proceed with such construction. In the latter event, the city will advertise and give due notice to all parties who contemplate submitting proposals, and furnish plans and specifications therefor. The viaduct now under consideration is known as the 16th St. Viaduct; is about 1,600 ft. in length, including approaches, and will range from 20 to 40 ft. above the streets and railway tracks. Plans and specifications will probably be submitted to the mayor and city council about Oct. 1, and after being approved, the railway companies will be officially notified to proceed with construction.

NEOSHO FALLS, KAN.—The Canton Bridge Co., Canton, O., has been awarded a $2,100 contract to construct a county bridge at this place.

NEWTON, KAN.—D. W. Wilcox, Mayor, informs us that the subway and viaduct crossings talked of in this city will be erected by the Atchison, Topeka & Santa Fe Ry. Co. The city has nothing to do with the matter, except to grant the privilege.

ST. JOSEPH, MO.—A contract has been awarded to Chas. W. Campbell for the Sixth St. viaduct.——The ordinance for the construction of the Grand Ave. viaduct by the Chicago Great Western Ry. Co. will be decided upon Oct. 5.

DENVER, COLO.—Petitions have been presented to the board of public works for the erection of a part of the old 14th St. viaduct, across Cherry Creek, on Stout St.

CHEHALIS, WASH.—Reports state that the contract for the construction of a bridge over Lincoln Creek has been given to the San Francisco Bridge Co., San Francisco, Cal.

MONTESANO, WASH.—The Columbia Bridge Co., Portland, Ore., has been awarded a contract to construct a steel bridge over the South Bay, according to reports.

ALBANY, ORE.—Bids are asked until 2 p. m., Sept. 29, for a bridge over the north fork of the Santiam River. Frank Crabtree, County Clk.

HEPPNER, ORE.—Bids are asked until Oct. 1 for a bridge over Rock Creek. A. G. Bartholemew, County Judge.

ISLAND CITY, ORE.—The Bullen Bridge Co., Portland, Ore., has been awarded a contract by the county commissioners, at $3,200, for a bridge over the Grande Ronde River.

OROVILLE, CAL.—Bids are asked until Oct. 3 for constructing a new approach to the bridge across the Feather River. H. D. Lansen, County Clk.

REDDING, CAL.—The county supervisors have awarded a contract to the Thompson Bridge Co., at $6,280, for a bridge across the north fork of Cottonwood Creek.

DELHI, ONT.—Bell & McCubbin, Engrs., St. Thomas, Ont., are preparing plans for a steel bridge 66 ft. long, to be constructed at this place, according to reports.

QUEBEC, QUE.—Bids are asked until Jan. 2 for construction a railway and highway bridge across the St. Lawrence River, as stated in our advertising columns. Ulric Barthe, Secy. Quebec Bridge Co., Quebec.

KEW, LONDON, ENGLAND.—Bids are asked until Oct. 3 for removing the old bridge and constructing a new masonry bridge, repairing approaches, etc., over the Thames River; also for constructing and removing a temporary bridge, according to reports. John W. Barry and C. A. Brereton, Engrs., 21 Delahay St., Westminster.

BUILDINGS.

BATH, ME.—J. T. Crosby, Pastor of Wesley M. E. Church, 33 Union St., Bath, informs us that William Hartwell, of Bath, has the contract for erecting a new church building, to cost between $10,000 and $13,000, and that S. H. Rogers is now completing the foundation for the same. All contracts have been let except those for the pews, the glass and for frescoing. Arch., W. R. Miller, Lewiston, Me.

ST. ALBANS, VT.—The following bids were received by the supervising architect, Washington, D. C., Sept. 19, for a low pressure, return circulation steam heating apparatus in the U. S. building in this city:

		Time.
Gaylord & Eltapence, Binghamton, N. Y.	$5,173	*75 days
Edward P. Bates, Albany, N. Y.	4,373	90 "
John F. Dalton, Savannah, Ga.	3,738	90 "
Huey Bros., Boston, Mass.	4,000	65 "
Richardson & Burgess, Washington	4,967	May 1, '99
G. S. Blodgett Co., Burlington, Vt.	4,904	

*Working days.

WATERBURY, CONN.—Plans are about completed, according to reports, for a new 12-room brick school building, to cost $40,000. Arch., Theodore B. Peck.

BROOKLYN, N. Y.—Bids are asked by the department of public buildings, at 346 Broadway, New York, until Oct. 11, for materials and work required for certain repairs and alterations to the municipal building of the Borough of Brooklyn, city of New York.——Bids are asked by the board of education, at 585 Broadway, New York, until Oct. 10, for erecting a frame extension to Erasmus high school building, in the Borough of Brooklyn.

GOWANDA, N. Y.—Bids are asked by the managers of the Collins State Homeopathic Hospital, until Oct. 4, for the necessary piping for steam supply from power house to hospital buildings, etc. Treas., Fred. J. Blackman, 626 Ellicott Square, Buffalo; Arch., Aug. C. Esenwein, of Buffalo.

HUNTINGTON (L. I.), N. Y.—The Huntington union school district, Sept. 20, voted to issue $20,000 in bonds for the erection of a new 2-story brick school building.

NEW YORK, N. Y.—Plans have been filed by the Cameron Co., 31 Nassau St., for a 3-story brick store and studio building, at 19th St. and 4th Ave., to cost $160,000. Arch., N. C. Mellen, 27 West 30th St.; by John Kilpatrick, 640 Madison Ave., for three 5-story brick flat and store buildings, at the Boulevard and 131st St., to cost $70,000. Archs., Neville & Bagge, 217 West 125th St.; by Mrs. P. Wertheim, for three 6-story brick and stone store and flat buildings, at 2011 to 2015 1st Ave., to cost $75,000. Arch., Max Muller, 21 Centre St.; by Abraham Stone and others, for two 6-story brick flat and store buildings, at Houston and Manhattan Sts., to cost $55,000. Archs., Horenburger & Straub, 122 Bowery; by Jobst Hoffman, Owner and Arch., 26 West 116th St., for two 5-story brick flat buildings, on 125th St., near the Boulevard, to cost $86,000.

NEW YORK, N. Y.—Bids are asked by the department of correction, 148 East 20th St., until Oct. 10, for installing three elevators on Blackwell's Island; two sureties required, $7,000 each.——Bids are asked by the board of education, at 585 Broadway, until Oct. 3, for heating and ventilating apparatus and electric lighting plant for public schools Nos. 40 and 166, Borough of Manhattan; also for new furniture for public school No. 153, Borough of The Bronx.

BOONTON, N. J.—Bids are asked until Oct. 11 for additions and alterations to the Lathrop Homestead, at Boonton, to provide accommodations for aged and disabled firemen of the state. Chn., Wm. H. Brown, Halsey and Academy Sts., Newark, N. J.

CAMDEN, N. J.—Bids are asked by the commissioners of public instruction until Sept. 30 for erecting a manual training and high school building at Haddon and Newton Aves.; also for a steam heating plant. Chn., C. Scheperkotter; Arch., Thomas Stephens, Masonic Temple, Newark.

NEWARK, N. J.—A 4-story brick and steel business building will soon be erected at Beaver and Clinton Sts., for Matthias Plum, at a cost of about $50,000. Arch., Thomas Cressey, 800 Broad St., Newark.

NEW BRUNSWICK, N. J.—Bids are asked by the board of education, until Oct. 11, for erecting a school building on French St., to cost about $26,000, excluding furnishing. Arch., Geo. K. Parsell, 363 George St., New Brunswick. Bids for this work were received from eleven contractors, Sept. 21, but the lowest estimate was that of Daniel Whitlock, at $32,127.

SOMERVILLE, N. J.—Wm. E. Bloodgood is said to be preparing plans for a 2-story building to be erected here for the Hiram Deat's Memorial Home, to cost $30,000.

ALLEGHENY, PA.—A $50,000 mining and engineering school building will be erected in this city this fall for the Western University. Chancellor, W. J. Holland.

PENNSBURG, PA.—G. T. Guthrie, of Philadelphia, has been awarded the contract to build the new stone church building for the German Lutheran Church of Pennsburg. Archs., Milligan & Webber, of Philadelphia.

PHILADELPHIA, PA.—Plans have been filed for a 3-story brick and stone library and hall building to be erected by F. S. Riggs for the Young Friends' Association, at 15th and Cherry Sts., at a cost of about $25,000. Arch., Wm. L. Price, 731 Walnut St.——Armstrong & Printzenhoff have been granted a permit to erect two sheds for the Philadelphia & Reading Ry. Co., to cost $10,000.——The Edgemoor Bridge Works Co. will construct three large corrugated iron frame sheds, with slag roofs, for the Pennsylvania R. R. Co., at a cost of $32,500.——Charles McCaul, 10 North 11th St., has been awarded the contract for erecting a new storage warehouse for Swift & Co., at Callowhill St. and Delaware Ave.——It is reported that several architects have been invited to submit plans for a new church building to be erected at 17th and Sansome Sts. for the Beth Eden Baptist Church, to cost about $500,000. Wm. A. Levering, Dr. W. W. Keen, B. Ogden Oxley, are on the building committee.——Eugene Lentilhon, 11 Broadway, New York, was the lowest bidder, Sept. 17, for erecting a new steel store house at the League Island Navy Yard, at $15,300.

PHILADELPHIA, PA.—Bids are asked until Oct. 10 for furnishing 9,000,000 building brick, as stated in our advertising columns. E. Kleinsmith, 13th and Market Sts., Philadelphia.——R. C. Ballinger & Co., 218 North 13th St., have been awarded the contract for erecting the Women's Medical College building, on Seybert St., to cost about $30,000. Arch., Addison Hutton, 4th and Chestnut Sts.

WILKESBARRE, PA.—The commissioners of Luzerne county, Sept. 23, decided to build a new court house in this city, on the site of the old building, at a cost of about $450,000.

WASHINGTON, D. C.—Henry Strong, owner of the corner at F and 12th Sts., destroyed recently by fire, is reported as contemplating the immediate erection of a large store building thereon.

NEWPORT NEWS, VA.—The following bids were received, Sept. 19, for erecting a new jail building: W. P. Bosher, of Newport News, $15,250; Pauley Jail Building & Mfg. Co., of St. Louis, $16,000; Brisborne & McGurd, of Newport News, $15,085; Van Dorn Iron Works Co., of Cleveland, O., $15,000.

KEYSER, W. VA.—The clerk of Mineral county, of Keyser, informs us that bids will be received on Feb. 10 for constructing a new county jail building, to cost $10,000, for which plans are now being prepared by Frank P. Milburn, of Charlotte, N. C.

NEW ORLEANS, LA.—Bids are asked until Oct. 8 for erecting a new school building in Algiers. W. S. Douglas, Comptroller.

DAYTON, O.—Plans have been selected, according to reports, for the new $500,000 union railway station to be built in this city. Archs., Elzner & Anderson, Cincinnati, O.

OBERLIN, O.—Bids are asked until Oct. 7, according to reports, for erecting a brick and stone building for the children's home of Lorain county; estimated cost, $32,000. Geo. H. Lewis, County Audr., Elyria, O.

OXFORD, O.—Bids are asked by the trustees of Miami University, until Oct. 12, for the brickwork in connection with certain improvements for said university. W. O. Thompson, Chn. Bdg. Com., Oxford; Archs., Hannaford & Sons, Hulbert Block, Cincinnati, O.

PORT HURON, MICH.—G. S. Germain, of Port Huron, has the contract for erecting a brick roundhouse for the Grand Trunk Ry. System, at 32d St., to cost about $40,000.

CHICAGO, ILL.—Reports state that the Methodist Book Concern has decided to erect a 10-story building at 57 Washington St., to cost about $150,000. Arch., Harry B. Wheelock, 226 La Salle St.——Contracts are being let for erecting an apartment building at 51st Boulevard and Washington Ave., to cost about $50,000. Archs., Wilson & Marshall, 218 La Salle St.

DANVILLE, ILL.—Bids are asked until Oct. 6 for putting in place the steam main and return pipes from the boiler house to the laundry building, etc., at the Danville branch of the National Home for D. V. S. Arch., W. C. Gunnell, of Danville.——We are informed that the following bids were received, Sept. 17, by the above Home, for heating and ventilating of barrack buildings: Pittsburg Heating Supply Co., Pittsburg, Pa. $8,379; L. J. Mueller Furnace Co., Milwaukee, Wis. $2,422; The Prox & Brinkman Mfg. Co., Terre Haute, Ind., $3,148.17; James A. Gelwick, Danville, Ill. $2,700. For plumbing, gas piping, etc., Robert W. Kyle, Wheeling, W. Va., $1,922; The Prox & Brinkman Mfg. Co., Terre Haute, Ind., $2,100.67; P. P. Gleason & Son, Chicago, Ill., $2,150; Jas. A. Gelwick, Danville, Ill. $1,875. For electric lighting apparatus, etc., C. E. Wheelock & Co., Peoria, Ill., $1,400; McFell Electric Co., Chicago, Ill., $1,476; Arthur Frantzen Co., Chicago, Ill., $1,315.

ST. PAUL, MINN.—Bids are asked until Oct. 4 for the purchase of $100,000 of bonds for the purpose of providing funds to facilitate the construction of the new state capitol building. Channing Seabury, Vice-Pres. of Capitol Com.

ST. PETER, MINN.—Bids are asked until Oct. 24 for a heating plant for the court house. Charles Hensel, County Audr.

ELDORADO, KAN.—It is reported that the Atchison, Topeka & Santa Fe Ry. Co. will erect a new $60,000 stone station in this city.

HELENA, MONT.—The following bids were received, Sept. 14, for erecting the new state capitol building in Helena: Montana Building Co., Butte, Mont. $289,891; C. E. H. Campbell Council Bluffs, Ia. $296,216; Texas Construction Co., Galveston, Tex., $321,870 and $359,865, the difference being in the quality of the fireproofing; G. W. Atkinson & Son, Colorado Springs, Colo. $329,500; D. R. Fotheringham, Spokane, Wash., $342,000; Butler & Ryan, St. Paul, Minn., sandstone, $377,000; granite, $462,000; W. J. Spear, Toledo, O. $404,598; William Goldie & Son, Chicago, Ill., $399,423. As stated in our last issue, the contract was awarded to the Montana Building Co. Jacob Soss, Gen. Mgr., to be completed within 20 months.

SAN SABA, TEX.—Bids are asked until Nov. 15 for constructing two cells about 7x10 ft., with corridor; bond, $500. John Selders, County Judge.

FORT LOGAN, COLO.—Bids are asked until Oct. 5 for a hot water heating apparatus for the hospital at Fort Logan. Lt.-Col. E. B. Atwood, U. S. Army, Denver, Colo.

STOCKTON, CAL.—Plans are being prepared, according to reports, for a new hotel and bath building at Jackson's baths south of Stockton, to cost about $20,000. Archs., Downing & Lemme, Yosemite Bldg., of Stockton.

VENTURA, CAL.—H. A. Giddings has secured the contract for the erection of a bank building in Ventura, to cost about $40,000.

CHARLOTTETOWN, P. E. I.—McDonald & Schurman are reported to have received the contract for erecting the new building for the Prince of Wales College and Normal School, to cost about $35,000. Arch., C. B. Chappell.

ST. GREGOIRE, QUE.—This city has decided to borrow $50,000, in order to erect a new school building.

SARNIA, ONT.—Geo. I. Proctor, of Sarnia, has been awarded the contract for erecting a brick roundhouse here for the Grand Trunk Ry., to cost about $80,000.

LONDON, ONT.—Bids are asked by the department of public works of Ontario, until Oct. 5, for erecting a normal school building at London.

SOPHIA, BULGARIA.—Bids are asked by the Bulgarian government, until Nov. 21, according to reports, for the erection of eight public offices, as follows: A ministry of public works, ways and communications; a ministry of commerce and agriculture; a ministry of the interior; a ministry of public instruction; a ministry for foreign affairs and public worship; a ministry of justice, and an audit office. Particulars can be obtained from the Commercial Department of the Foreign Office.

WATER-WORKS.

BERWICK, ME.—The question of securing a water supply from the works at Somersworth, N. H., is being considered by the citizens of this place. Wm. S. Mathews and Wm. H. Rich are on the committee.

WARREN, ME.—A company is reported to have been organized to build works for this place. Population (1890), 2,097. Pres., Benj. Burton; Treas., W. F. Wight.

WESTON, MASS.—The question of securing an increased water supply is being considered. Water at present is furnished by the Weston Water Co.

BRANFORD, CONN.—The Branford Electric Co. has awarded the contract for building works to M. P. Rice, of Guilford, Conn. Engrs., Nichols & Potter, New Haven.

RIDGEFIELD, CONN.—Local papers state that arrangements are being made by the Ridgefield Water Co. to begin work at once on the proposed works. Population, 1,000; in summer, 2,200.

ALBANY, N. Y.—The following bids were received by the water board Sept. 20 for improving Bleecher reservoir, as advertised in Engineering News: E. N. Haines & Co., Rhinebeck, N. Y. (awarded contract), $28,456; J. Dunfee & Co., Syracuse $28,644; John Doyle, Albany, $29,677; Frank Pidgeon, Saugerties, $30,438; Dollard & Holler, Albany, $30,926; M. J. Dady, Brooklyn, $32,874; R. B. Lewis, Herkimer, $34,393. Engr.-in-Charge, David R. Lee.

CHARLOTTE, N. Y.—Bids are asked until Oct. 15 for constructing a system of water-works and an electric light plant for this village, as stated in our advertising columns. John M. Allen, Pres. Municipal Bd.

FISHKILL, N. Y.—The question of building works is again being considered.

NIAGARA FALLS, N. Y.—H. A. Keller, Supt. water-works, writes us that the board of public works has directed the city engineer and the superintendent to secure cost of a 10,000,000-gallon filter plant. No report has yet been submitted. The question will have to be voted upon by the citizens.

SONYEA, N. Y.—Bids are asked until Oct. 1 for furnishing the materials and for extending the water mains at the Epileptic State Hospital to the new buildings on the east side of Kisbaqua Creek. There will be required about 4,300 ft. of 4, 8 and 10-in. pipe, 13 valves, 4 hydrants, etc. Supt., Dr. Wm. P. Spratling, Sonyea; Secy., H. E. Brown.

WINDSOR, N. Y.—T. V. Furman, Pres., writes us that it is proposed to buy the works now in use and to put in a new system. Sources of supply are being investigated and it is likely that work will be begun in the spring. The village board will no doubt let the work by contract. Not more than $20,000 in bonds will be issued. Population, 800.

MILTON, DEL.—It is stated that a company will be organized to build works for this place.

PHILADELPHIA, PA.—Bids are asked until Oct. 4 for building boilers, brick chimneys and annex to boiler house for the Roxboro pumping station, and excavating pipe trench and furnishing lead for joints for the Queen Lane pumping main No. 2. Dir. Pub. Wks., Thos. M. Thompson.

WYTHEVILLE, VA.—Bids are asked until Oct. 17 for furnishing and laying 6,155 ft. of 6-in. cast-iron water pipe, 3,591 lbs. of pig lead, 100 lbs. of jute packing, etc. Chn. Com., J. E. Perkins; Financial Agent, W. L. Stanley.

WEST TAMPA, FLA.—The board of trustees have engaged J. N. Hazlehurst, Ch. Engr., Bd. Pub. Wks., Tampa, Fla., to prepare plans for works to cost $30,000. Bonds for the work have been sold. Bids will probably be asked about Nov. 15.

ELBERTON, GA.—The citizens are reported to have voted against granting a franchise for works to Geo. J. Baldwin, of Savannah. The people, however, want to have works, but prefer municipal ownership. Clk., W. B. Henry.

LAKE PROVIDENCE, LA.—R. L. Hill writes us that no decision has yet been made with regard to plans and specifications for city works. Everything awaits the voting of bonds and a special tax in November. No engineer has yet been employed.

HENDERSON, KY.—The Edward P. Allis Co., Milwaukee, Wis., is reported to have been awarded the contract for furnishing a 3,000,000-gallon pump at $12,000.

CINCINNATI, O.—The David Folz Asphalt Paving Co., Cincinnati, has been awarded the contract for the masonry work for the California pumping station at $110,000.

COLUMBUS, O.—Bids are asked until Oct. 3 for furnishing the materials and for constructing a concrete masonry dam for this city. The itemized bids, received Sept. 10, but rejected, were given in our issue of last week. Dir. Pub. Wks., F. A. Jacobs; Clk., Jas. A. Fanning.

GALLIPOLIS, O.—Bids are asked until Oct. 24 for furnishing the materials and for constructing works for the hospital. Archs., Yost & Packard, Columbus; Secy. Bd. of Mgrs. Ohio State Hospital, H. C. Rutter.

JACKSON, O.—This place voted Sept. 19 to issue bonds for works.

McCONNELLSVILLE, O.—This place voted Sept. 19 to issue $20,000 in bonds for works. Cy. Clk., Geo. Birch.

SPRINGFIELD, O.—The superintendent has submitted estimates for about 3,000 ft. of water pipe.

LEWISVILLE, IND.—The question of building works is being considered, according to reports.

LOWELL, IND.—The Lowell Water-Works Co. has been incorporated by John P. Dales, S. M. Bartlett and C. M. Seckner; capital stock, $1,500.

NEW ALBANY, IND.—We are informed that the Home Crystal Water Co. has been granted a 25-year franchise. Work will be started within 60 days from the passage of the ordinance. The company will get $50 per hydrant for 200 hydrants. About 25 miles of 6 to 20-in. pipe will be laid, and two compound 3,000,000-gallon pumps will be put in. Engr., Frank Shefold, New Albany; Pres., Peter Arlund, Copenhagen, Denmark.

THORNTOWN, IND.—The question of building works at once is again being considered.

LAKE ODESSA, MICH.—Bids were asked until Sept. 27 for building the proposed works, to cost $10,000. Pres., Wilson Elliott; Clk., Wm. Goldring.

MOUNT PLEASANT, MICH.—We are informed that this place voted Sept. 21 against issuing bonds for works and a light plant. Mayor, C. M. Brooks; Clk., W. L. Davis.

WAYNE, MICH.—The question of issuing $20,000 in bonds for works is again being considered.

MILLEDGEVILLE, ILL.—Bids are asked until Oct. 7 for furnishing and laying 3,500 ft. of 6 and 8-in. pipe, 7,000 ft. of 4-in. spiral riveted pipe, about 25 double discharge fire hydrants, etc. Clk., S. A. Smith; Pres., J. F. Greenawalt.

MONMOUTH, ILL.—The question of changing the location of the pumping station is reported as being considered. Engr., D. W. Mead, Room 502, Wm. Brown Bldg., Rockford, Ill.; Chn. Com., Councilman Turnbull.

NEKOOSA, WIS.—Thos. E. Nash writes us that this village contemplates putting in works and wishes to hear from contractors. Address the president of the village board.

OSAGE, IA.—Bids are asked until Oct. 6 for furnishing the materials and for constructing works, as stated in our advertising columns. Consult. Engr., G. H. Merridith, Cedar Rapids; Chn. Water Com., J. P. Williams.

WINONA, MINN.—C. E. Kunie, Water Comr., writes us that the city will lay 33 blocks of 6 to 16-in. cast-iron water pipe, set 29 Mathews' hydrants and 10 valves, this fall.

DES MOINES, IA.—The council has directed the Des Moines Water Co. to build new mains in 10 streets.

CASSVILLE, MO.—The question of building works and a light plant is being considered, according to reports. Mayor, Harrison Horine.

SALINA, KAN.—The new work for the plant at this place will consist of the addition of a 10- 16- 12- 18-in. duplex compound non-condensing engine, two new boilers, nine new deep wells, giving a water supply three times the present supply, with means of doubling again when necessary; some new pipe lines and some additions to pumping station. The duplex pump being for a relay is not made condensing. Most of the material is already contracted. The rest will probably be contracted for at once. Engr., G. W. Parsons, 611 Baltimore Ave., Kansas City, Mo.

WYNNE, ARK.—It is stated that the city will issue bonds at once for the proposed works and electric light plant. Chn. Com., Wm. M. Kennedy.

PALESTINE, TEX.—The Palestine Water-Works Co. has been incorporated, with a capital stock of $100,000, by G. K. Cook, W. B. Johnson and G. W. Harris. This company will probably take charge of the old works of the Palestine Water Co.

BRECKENRIDGE, COLO.—D. Mitchell Bros., Denver, Colo., have been awarded the contract for building works, at $21,400.

FLORENCE, COLO.—An election has been called for Oct. 11 to vote on the question of issuing $135,000 in bonds for works. It is proposed to construct two storage reservoirs with a capacity of 95,000,000 gallons. A pipe line, 10½ miles long, will bring the water to Florence from the mountain south of the town. Engr., Hiram Phillips, Oriel Bldg., St. Louis, Mo.

PUEBLO, COLO.—C. P. Allen, Ch. Engr. Denver Union Water Co., Denver, Col., has submitted a report for an increased water supply, to cost about $55,000. T. O. Richards, Supt. Water-Works, has been directed by the trustees to secure prices of materials for the extension.

DAVENPORT, WASH.—It is stated that the council is again considering the question of works.

TACOMA, WASH.—John Holgate, Chn. Fire and Water Comn., writes us that the city has under contemplation plans for both a new source and a better or larger water supply from the present source. Estimated cost, about $200,000.

SAN BERNARDINO, CAL.—The Highland Domestic Water Co. has been incorporated, with a capital stock of $25,000, by C. W. Longmire, C. L. Frazer and G. W. Prescott.

REDLANDS, CAL.—This city is investigating sites for a water supply source for municipal works.

PASADENA, CAL.—W. B. Clapp, Cy. Engr., writes us that the matter of municipal ownership is in the hands of the citizens' committee. It is working for an independent water supply from wells, tunnels, etc., and is not dealing with the present companies. It is proposed to sink test wells at once, and, after plans and estimates are made, submit the bond issue proposition to the voters, which will also include sewer extension, etc. Population, 12,000.

SOMONA, CAL.—An election will be held Oct. 24 to vote on the question of issuing $15,000 in bonds for completing the works. Cy. Clk., Robt. A. Pope.

TEMPE, ARIZ.—The committee has agreed to recommend to the council the granting of a franchise for works to Hoadley & Co. Chn. Com., R. O. Greeves.

VERDUN, QUE.—McConnell & Marion, Montreal, Que., are preparing plans for works and a sewerage system.

STRATHROY, ONT.—R. J. Avery writes us that nothing definite regarding the proposed works has been done as yet. The estimated cost of putting in the works four years ago was $23,000. Population, 3,000. F. J. Craig may be addressed.

XOCHIMILEO, MEXICO, MEX.—Press reports state that this place is to have water-works.

IRRIGATION.

ST. PAUL, MINN.—Bids are asked until Oct. 3 for constructing a ditch in the town of Mounds View. D. M. Sullivan, County Audr.

BEAUMONT, TEX.—A contract has been awarded to E. A. Hayne, by the Jefferson County Irrigation Co., to construct a levee canal nine miles long, from Pine Island bayou.——Geo. W. Fitch has awarded a contract to W. C. Dushine, for constructing a dam across White's bayou, to irrigate about 200 acres for rice cultivation.

JACKSON, CAL.—The Bule Lakes Water Co. is contemplating the construction of a reservoir and ditch system to cost about $400,000, according to reports.

ORANGE, CAL.—At the meeting of the Santa Ana Valley Irrigation Co. to be held Oct. 5, a proposition will be considered to cement the ditches and make other improvements.

SALT LAKE CITY, UTAH.—On Sept. 10 a contract for over a mile of 6-in. double-riveted No. 18 B. W. G. asphalted sheet steel pipe was awarded by A. V. Taylor and associates to S. V. Trent, of Salt Lake City, at 22½ cts. a ft. The pipe will be manufactured by Schaw, Ingram & Batcher, of Sacramento, Cal. It will be used for conveying the water from a spring in Neff's Canon, 10 miles east of Salt Lake City, on to a body of land for fruit-growing. This will be the first instance of water for irrigation in Utah being conveyed for any distance solely through a metal or wooden pipe. W. P. Hardesty, Engr., Salt Lake City.

HEMET, CAL.—The Hemet Water Co. proposes to spend about $20,000 in improving its water system. The flume and ditch will be covered; also a pipe line will be run from the crosscut near Florida to Park Hill, where a reservoir will be built, and large covered filters put in at an elevation of 150 ft. above Hemet, to have a capacity of 500,000 gallons per day. This water will run through an independent pipe line to the Lake Hemet Co. for domestic purposes. The company will also replace their 25 sections of flume, above Florida and Little Lake, the flume to be 36x54 ft. and have a capacity of 4,000 inches. The diversion dam will also be repaired and improved. P. N. Myers, Gen. Mgr.

SEWERAGE.

BOSTON, MASS.—Bids are asked until Sept. 30 for constructing 1,875 ft. of sewers in Savin Hill Ave. Supt. of Sts., Benj. W. Wells.

NEWTON, MASS.—H. D. Woods, Cy. Engr., writes us that plans for sewers for Newton were prepared in 1891. At a recent meeting the aldermen voted to appropriate money for sewers in Upper Falls. The work will be done by the sewer department. The only contracts that may be let will be for brick-cement by the street commission.

NEW HAVEN, CONN.—Bids are asked until Oct. 4 for constructing a sewer in Sherman St. Cy. Engr., C. W. Kelley.

ALBANY, N. Y.—Bids are asked until Oct. 3 for constructing 15 and 10-in. pipe sewer in Clare Ave. Clk. Bd. of Contract, Thos. J. Lanahan.

BUFFALO, N. Y.—The council proposes to build an 8-ft. brick trunk sewer in Emslie and Van Rensselaer Sts., at a cost of about $90,000.

BUFFALO, N. Y.—Bids are asked until Oct. 6 for a 3-ft. 3-in. brick sewer in Hickory St. R. G. Parsons, Secy. Bd.

COHOES, N. Y.—Bids are asked until Oct. 12 for constructing sewers, as stated in our advertising columns. Cy. Clk. and Clk. Pub. Improvement Comn., Wm. J. Elliot.

SARATOGA SPRINGS, N. Y.—Bids are asked by the city clerk until Oct. 10 for constructing a sewer, at a cost of $1,000.

SYRACUSE, N. Y.—It is proposed to build a 24 to 15-in. pipe sewer in certain streets at a cost of about $11,000. Cy. Clk., M. Z. Haven.

NEWARK, N. J.—The contract for building sewers in Clinton Ave. has been let to Headley & Christie, at $17,-181. Gen. Supt. of Sts, M. F. McLaughlin.

NEW BRUNSWICK, N. J.—It is proposed to construct a sewer in Remsen Ave. Sewer Comr., Chas. W. Kent.

SEA ISLE CITY, N. J.—Arrangements are reported as being made for a sewer to cost about $7,000.

CARLISLE, PA.—The question of building a sewer along the railway track north of Penn St. is being considered. It is probable that plans will be prepared by Chauncey Ives, Ch. Engr. Cumberland Valley R. R. Co., Chambersburg, Pa.

GREENVILLE, PA.—Bids are asked until Oct. 1 for constructing 1½ miles of pipe sewers, according to reports. Borough Secy., H. L. Keck.

SHERADEN, PA.—Bids are asked until Sept. 30 for building 7,100 ft. of 18 and 15-in. pipe sewers, and also for 3,974 cu. yds. of grading in Water St. Borough Engr., Jas. B. Smith, 434 Fourth Ave., Pittsburg.

DALTON, GA.—Plans for a system have been adopted. An election will be held Nov. 2 to vote on the question of issuing $30,000 in 6% 30-year bonds for the system and a light plant. Engr., J. L. Ludlow, Winston, N. C.; Mayor, W. H. Pruden.

PIQUA, O.—Bids will be asked at once by the city clerk for building sewers in the southern portion of the city.

SHELBY, O.—We are informed that the following bids were received Sept. 19 for constructing about six miles of sewers: Engr., J. B. Weddell; Clk., W. F. Sonnanstine: D. R. McArthur, Kenton, O., $21,623; S. S. Eaton, Lafayette, Ind., $28,542; G. P. Jacobs, Chicago Junction, O., $17,126; W. G. Irwin, Greenville, O., $20,260; M. J. Cullan, Sandusky, O., $26,751; Adams Bros., Zaneswill, O., $21,-409; C. R. & S. H. DeGroodt, Youngstown, O., $17,142; Ulrick & Co., Springfield, O., $19,878. The work will include: 1,312 ft. of 12-in. pipe; 3,987 ft. of 10-in.; 5,491 ft. of 9-in.; 17,729 ft. of 8-in.; 4,690 ft. of 6-in., and 368 ft. of 10-in. iron pipe; 55 manholes, 63 lampholes and 16 flush tanks. Engineer's estimate, $18,500.

TOLEDO, O.—Jas. McKinney has been awarded the contract for building the sewer in Adams St., at $35,285.

INDIANAPOLIS, IND.—The board of public works proposes to build a main brick sewer in Michigan St. for a distance of 5,155 ft. This sewer will have branches in a number of streets.

BAY CITY, MICH.—Bids are asked by the city clerk until Oct. 3 for constructing a sewer in Raymond Ave.

CHICAGO, ILL.—The board of local improvements has passed ordinances to build 10 miles of sewers and 15 miles of pavements, to cost about $700,000.

GRANITE CITY, ILL.—The councils of this city and Madison, Ill., propose to build a joint system at a cost of $97,000. Councilmen Rosenberg and White, of Granite City, and Grayson and Hinds, of Madison, are on the committee. Julius Pitzmann, of St. Louis, Mo., prepared the plans.

MOLINE, ILL.—The council proposes to build certain sewers and pave in several streets this fall at a cost of about $15,000.

MADISON, WIS.—Bids are asked until Oct. 14 for constructing 21,606 lin. ft. of sewers from 12 to 6-in. and 12 to 3 ft in depth, as stated in our advertising columns. Cy. Engr., McClellan Dodge; Cy. Clk., O. S. Norsman.

CLINTON, IA.—Bids are asked by W. E. Russell, Cy. Clk., for building a sewer in Ash St.

COUNCIL BLUFFS, IA.—It is proposed to construct sewers in certain streets. Cy. Clk., N. C. Phillips.

OSKALOOSA, IA.—D. C. Waggoner, Cy. Clk., writes us that the city will build a system next year. About a mile of intercepting sewer will be built. Cy. Engr., Saml. Ver Ven.

FARGO, N. DAK.—Jos. Kennedy, Fargo, has been awarded the contract for constructing two miles of pipe sewers.

BILLINGS, MONT.—J. R. Hinds & Co., Butte, Mont., have been awarded the contract for building the system at about $15,000. The council will soon be petitioned to make the sewers longer than at present proposed.

BROOKFIELD, MO.—E. E. Ward, Mayor, writes us that the city voted Sept. 13 to put in a system, but voted against issuing the necessary bonds. Another election will soon be held.

KANSAS CITY, MO.—Bids are asked by the city clerk until Oct. 4 for constructing the Vine St. sewer, to cost about $35,000.

GAINESVILLE, TEX.—The New Odorless Sewerage Co. has been incorporated with a capital stock of $50,000 by Jack Steele, M. P. Kelley and W. H. Steele.

GALVESTON, TEX.—The Galveston Sewer Co. has agreed to appoint an arbitrator to consider the question of selling the system to the city. Pres., Isaac Heffron.

SHERMAN, TEX.—J. E. Kern, County Surv., writes us that the city is figuring on putting in a system. Address A. A. Fielder, Mayor.

DENVER, COLO.—The question of making extensions to the system is being considered. David Seerie and H. C. Lowrie, of the Bd. of Pub. Wks., may be addressed.

BLAINE, WASH.—The question of improving the system is being considered. Councilmen Gilday and Glen may be addressed.

RIVERSIDE, CAL.—The citizens have petitioned the city trustees to build new sewers. Supt. of Sts., C. W. Finch.

SANTA ANA, CAL.—Press reports state that the contract for building a second section of the proposed system will be let about Oct. 25.——Frank Heil and J. Damron, Santa Ana, have been awarded the contract for building the first section. The Los Angeles Sewer Pipe Association, Los Angeles, Cal., has the contract for the pipe. The entire system will cost about $65,000. Engr., H. C. Kellogg.

HAMILTON, ONT.—It is proposed to build sewers in two streets at a cost of about $6,200. Councilman Ten Eyck, Chn. Com.

VERDUN, QUE.—McConnell & Marion, Montreal, Que., are preparing plans for a system and water-works, and will superintend the construction.

MEXICO, MEX.—It is stated that the contract for building the system for this city has been let by the sanitation board to Vezin & Letellier, Paris, France. The work is to be completed in four years.

GARBAGE DISPOSAL—STREET CLEANING

BROOKLYN, N. Y.—The board of estimate has appropriated $27,000 for cleaning the sewers.

ATLANTIC CITY, N. J.—Jos. Thompson, Mayor, has vetoed the ordinance awarding the contract for a garbage disposal plant to Thos. K. Dalsell at $29,900, the price being considered excessive.

PHILLIPSBURG, N. J.—B. C. Frost, Mayor, writes us that the construction of a garbage disposal plant for this city is not contemplated.

LANCASTER, PA.—Frank B. Kendig has been awarded the contract, at $1,840, for cleaning the streets from Oct. 1 to April 1, 1899.

WARREN, PA.—Dr. John Curman, Supt. Health, writes us that the trustees have decided on the advice of an expert not to erect a garbage disposal plant.

BALTIMORE, MD.—It is estimated that $506,737 will be required for cleaning the streets the coming year. A number of garbage carts, etc., will probably be purchased. Supt. St. Cleaning, Capt. F. R. Bye.

NEW ORLEANS, LA.—The question of locating garbage disposal plants in different parts of the city is being considered. The present contract for garbage disposal will expire March 1. Councilman Dreyfous may be addressed.

BAY CITY, MICH.—L. E. Ruggles, M. D., Health Officer, writes us that there is a committee from the council to act with the board of health in regard to adopting a plan of garbage disposal. The disposal will probably be by cremation, but nothing definite has been done.

HAMILTON, ONT.—It is stated that W. E. Gower, who was recently awarded the contract to put in a garbage incinerator, has failed to sign the contract.

STREETS AND ROADS.

BOSTON, MASS.—Bids are asked until 12 m., Sept. 29, for macadamizing North Harvard St., from Western Ave. to the Charles River, and Stuart St., between Dartmouth St. and Trinity Place. B. W. Wells, Supt. Sts.

EAST PEPPERELL, MASS.—McCusker Bros., Waltham, Mass., have been awarded a $10,700 contract for road work on Main St.

HADLEY, MASS.—Bids are asked until 12 m., Sept. 29, for macadamizing a section of road. T. C. Mendenhall, Chn. Mass. Highway Comn., 4 Mt. Vernon St., Boston.

WALPOLE, MASS.—Bids are asked until 12 m., Sept. 29, for building about 5,000 lin. ft. of highway. T. C. Mendenhall, Chn. Mass. State Highway Comn., 4 Mt. Vernon St., Boston.

NEW HAVEN, CONN.—Bids are asked until Oct. 4 for crushed stone paving and cobble gutters on Arch, Prospect, Union, Frank and Munson Sts. C. W. Kelly, Cy. Engr.

AUBURN, N. Y.—The council has voted to spend $1,750 to pave a portion of Exchange St. with asphalt.

BROOKLYN, N. Y.—Bids are asked until Oct. 1 for grading at the navy yard, to cost about $10,000. M. T. Endicott, Ch. Bureau Yards and Docks, Washington, D. C.

MAMARONECK, N. Y.—Bids are asked until Oct. 5 for furnishing the material and grading in Union and Railroad Aves. Chas. W. Buckter, Village Clk.

NEW ROCHELLE, N. Y.—C. W. S. Wilson, Village Engr., informs us that the question of issuing $100,000 for paving etc., will probably not be brought up again until next spring, or until the village becomes a city.

ROCHESTER, N. Y.—Bids are asked until Oct. 7 for asphalt paving on Glenwood Park; estimated cost, $13,500. Chas. M. Beattie, Clk. Executive Bd.

CAMDEN, N. J.—Bids are asked by the council until Oct. 27 for paving Cooper St., from 11th to Federal St.——Bids are soon to be asked for paving Penn St., from 9th to 10th St., with Belgian block.

JERSEY CITY, N. J.—Bids are asked until Oct. 3 for about 340 sq. yds. of Belgian paving, 4,100 cu. yds. of excavation, etc., on Germania Ave. Geo. T. Bouton, Clk. St. Comrs.

NEWARK, N. J.—Bids are asked until Sept. 30 for grading, filling, etc., on Lexington St. and Roseville Ave. M. F. McLaughlin, Gen. Supt. St. Comrs.

CONSHOHOCKEN, PA.—Bids are asked until Oct. 1 for curbing, paving and guttering in portions of about 15 streets. A. L. Murphy, Chn. Com.

ERIE, PA.—Bids are asked by the city engineer until Oct. 6 for paving with brick 11th St., from Peach to State St., about 1,100 sq. yds.

LANSDOWNE, PA.—It has been voted to issue $15,000 in bonds for street improvements, etc.

SCRANTON, PA.—Bids are asked until 7:30 p. m., Sept. 29, for brick paving on Hyde Park Ave. M. T. Lavelle, Cy. Clk.

SHARPSBURG, PA.—Bids are asked until Oct. 18 for 4,862 sq. yds. of stone paving, 27,737 sq. yds. of brick paving, 11,946 sq. yds. of asphaltum paving, etc., as described in our advertising columns. E. C. Hulbert, Borough Engr., 1035 North Canal St.; T. R. Higgins, Clk.

PITTSBURG, PA.—Bids are asked until Oct. 6 for grading, paving, curbing and laying sidewalks in portions of about 18 streets. E. M. Bigelow, Dir. Pub. Wks.

BALTIMORE, MD.—A committee will be appointed by the North Baltimore Improvement Association to ask the council to pave Fulton Ave. with asphalt from Druid Hill to Pennsylvania Ave.

ROCKVILLE, MD.—W. D. Sales, Orange, Va., has been awarded a contract by the county commissioners at $25,757, for constructing about 7¼ miles of pike road, between this place and Bethesda.

CLEVELAND, O.—Bids are asked until Oct. 7 for brick paving, draining, flagging, etc., on Bethesda St. and Bond Alley. Geo. R. Warden, Dir. Pub. Wks.

EAST CLEVELAND, O.—Bids are asked until 12 m., Sept. 29, for grading, draining, and brick paving on Mt. Union St. Walter P. Rice Engineering Co., Engrs., Cleveland; H. B. Chapman, Village Clk.

HAMILTON, O.—Bids are asked until Oct. 17 for constructing a conduit and certain improvements on Market St., between Water and 4th Sts.; estimated cost, $25,000; also until Oct. 24 for 24,000 sq. yds. of asphalt block, sheet asphalt or brick paving, on 2d St., from Central Ave. to Black St. M. O. Burns, Clk.

LORAIN, O.—D. C. Fisher informs us that the proposed paving in 2d St., has been delayed and will not be laid before spring. The people are in favor of asphalt.

MADISONVILLE, O.—Bids are asked until Oct. 6 for constructing cement sidewalks on portions of Peabody, Walnut and Station Sts. and for grading and macadamizing Peabody Ave. Bennett Carter, Clk.

URBANA, O.—Bids are asked until Oct. 10 for furnishing material and grading, graveling, etc., on Sara St. W. E. Berry, Cy. Clk.

ANDERSON, IND.—M. M. Dunlap, Mayor, informs us that it is probable that five streets will be paved next year with asphaltum. Eleventh street and six blocks are now being paved with brick, by Chas. S. Henry and Charles Daniels, respectively. Starry Rogers, Cy. Engr.

LOGANSPORT, IND.—Walter A. Osmer, Cy. Engr., writes us that contracts for brick paving were awarded Sept. 21 to the Lux & Talbott Stone Co., Logansport, for 3d St., amounting to $7,756, and for Sycamore St., at $15,962. Bonds will be issued for payment.

INDIANAPOLIS, IND.—Bids are asked until Oct. 3 for grading, graveling, etc. M. A. Downing, Chn. Bd. Pub. Wks.

MUNCIE, IND.—Bids are asked until Oct. 10 for grading and graveling Gilmer Ave. F. W. Clevenger, Cy. Clk.

RICHMOND, IND.—Bids are asked until 2 p. m., Sept. 30, for constructing brick walks on South 6th St. Geo. L. Knollenberg, Clk. Bd. Pub. Improvements.

TERRE HAUTE, IND.—Bids are asked until Oct. 4 for improving Cedar and other streets. Wm. K. Hamilton, Clk.

DETROIT, MICH.—A contract has been awarded to T. J. Kennedy, at $10,479, by the board of public works, for paving in 14th St., with cedar block.

CHICAGO, ILL.—The board of local improvements has passed an ordinance to construct 10 miles of sewers and 15 miles of pavement, to cost about $700,000.

OSKALOOSA, IA.—D. C. Waggoner, Cy. Clk., informs us that 20,000 sq. yds. of brick paving, to cost about $27,000, is proposed. Samuel Verven, Cy. Engr.

ST. PAUL, MINN.—Bids are asked until 2 p. m., Sept. 29, for grading Summit Place and Hamline Ave., and improving Marshall Ave. C. H. Bronson, Clk. Bd. Pub. Wks.

OMAHA, NEB.—Bids are asked until Oct. 7 for asphalt, brick or stone paving, curbing, etc., on Mason St., from 31st to 33d St. Andrew Rosewater, Chn. Bd. Pub. Wks.

FARGO, N. DAK.—The council has awarded a contract to James Kennedy, Fargo, for 41,000 sq. yds. of cedar block paving.

MARSHALL, MO.—H. W. Kolkmeyer & Co., Jefferson City, Mo., has been awarded a contract for macadamizing, etc., at $24,000.

PORTLAND, ORE.—The council proposes to improve Grand Ave., by grading, etc.

VACAVILLE, CAL.—Bids are asked until 1 p. m., Oct. 1 for paving the bridge over Ulatis Creek, with asphalt. A. M. Stevenson, Town Clk.

VENTURA, CAL.—Bids are asked until Oct. 6 for furnishing the material and grading, etc. A. S. Kenagy, County Clk.

MITCHELL, ONT.—The question of borrowing $5,000 for sidewalks will be submitted to a vote, according to reports.

TORONTO, ONT.—Chas. H. Rust, Cy. Engr., writes us that after bids had been received for brick paving on concrete foundation on Major St., a petition has been presented for asphalt. The people who favor brick and those who prefer asphalt paving are now striving to be the first to present a fully signed petition, so that the work may be proceeded with.

WINNIPEG, MAN.—Bids are asked until Oct. 19 for asphalt paving on Portage Ave., about 18,000 sq. yds. C. J. Brown, Cy. Clk.

MANUFACTURING PLANTS.

WATERBURY, CONN.—Holmes, Booth & Haydens, of Waterbury, are making extensive repairs and additions in their plant. The Berlin Iron Bridge Co., East Berlin, Conn., have secured the contract for the steel roof work for the boiler room, 40x80 ft.; the new muffle room, 30x80 ft.; and the new brass mill, 118x90 ft. These new additions are to be fireproof throughout. The side walls will be of brick, the roof supports of steel, and the covering of corrugated iron. The roofs are arranged with skylights for lighting the interior of the building, and monitors for ventilation.

HOMESTEAD, PA.—Press reports state that a large plant for the manufacture of guns will probably be built here by the Carnegie Steel Co.

SHARON, PA.—It is announced that the Bessemer Furnace Co., of Mahoning and Shenango valleys will build a $2,000,000 steel mill at Sharon.

TALLADEGA, ALA.—Howard & Bullock, of Pawtucket, R. I., has been awarded the contract for machinery for the new addition to the Talladega Cotton Mills. Estimated cost of improvements, $50,000.

CLEVELAND, O.—The carpet cleaning works of the D. O. Summers Carpet & Rug Mfg. Co., at 118 East Prospect St., was recently destroyed by fire, causing a loss of about $60,000.

YOUNGSTOWN, O.—It is reported that the Brown & Bonnell Iron Co., of Youngstown, is having plans prepared for the erection of a continuous mill, to cost about $150,-000; to be completed by Jan. 1.

LOS ANGELES, CAL.—The Los Angeles Soap Co., whose plant was recently destroyed by fire, informs us that bids are now being received for the erection of a new 4-story brick building. Contracts will be let to local contractors. Archs., Morgan & Walls, Los Angeles.

GAS PLANTS.

BUFFALO, N. Y.—Alderman Franklin has introduced a resolution to grant a permit to the Erie County Natural Gas Fuel Co. to manufacture gas for fuel, etc. E. G. S. Miller, Julius Binz and Arthur W. Hickman are interested.

BUFFALO, N. Y.—F. V. E. Bardol, Cy. Engr., reports that the proposed municipal gas plant will consist of a building 400x90 ft., with two coal pockets, a generating house of the same dimensions and two retort houses; two gas holders, each 157 ft. in diameter, and with a combined capacity of 3,500,000 cu. ft.; two purifying houses, each 50x171 ft.; an engine room, 40x100 ft.; a relief holder, an ammonia and tar tank, two oil tanks, a tar tank and a storehouse and office; estimated cost, about $800,000.

ATLANTIC CITY, N. J.—The Atlantic City Gas & Water Co. will lay a new main on Pacific Ave. Joseph Barton, Pres.

WESTWOOD, N. J.—It is reported that the council is considering a petition for the right to construct gas works.

PITTSBURG, PA.—Reports state that Dr. F. L. Slocum, W. A. Dinker, Joseph Kelling and others, propose to construct a gas plant for fuel, to cost about $100,000.

COLUMBUS, O.—The East Ohio Gas Co. has been incorporated with a capital stock of $1,000,000. It is proposed to pipe natural gas to Canton, Akron and Massillon, O., from the Wheeling gas fields. The council is now considering the granting of a franchise.

GLENVILLE, O.—Bids are asked until Oct. 1 for furnishing gas for light and fuel for 10 years. F. L. Moores, Chn. Com.

CICERO, IND.—It is reported that a franchise has been granted to W. H. Roney for laying gas and water pipes through the town.

WABASH, IND.—The Dieterich Natural Gas Syndicate proposes to install a municipal gas plant, to furnish acetylene gas for illuminating. The apparatus for making coal gas will be taken out and acetylene generators will be substituted and new mains will be laid.

FARIBAULT, MINN.—The Faribault Gas & Engine Co. wants bids for laying about two miles of gas mains, according to reports.

GRAFTON, NEB.—A proposition to establish an acetylene gas plant for lighting the streets is being considered. Messrs. O'Donnell, Cushing and Hinkley compose the committee.

NEW COMPANIES.—Hazlehurst Gas Co., Bradford City, Pa.; $3,000, with $300 paid in; to produce and supply natural gas in Hazlehurst and Hutchins, Pa.; C. V. Merrick, Treas.; Frank A. Fralic, Wm. M. Boyce, D. H. Jack, Bradford, Pa.; H. L. Smith, Binghamton, N. Y.

The City Gas Co., Staunton, Va.; $200,000; R. D. McCue and R. D. Apperson, Staunton; Harry Marquand, New York city; Lewis C. Harris, Forest Hill, N. J., and F. B. Poor, of Hackensack, N. J.

Youngstown Acetylene Gas Co., Youngstown, O.; $10,000; to manufacture acetylene gas, appliances and supplies; W. J. Wallace, Frank A. Williams, E. Hartzell, I. Hartzell, A. I. Nicholas, D. J. Jones and J. Sylvanus.

City of Lincoln Gas Co., Lincoln, Ill.; $100,000; to furnish gas, electricity and water; Frank R. Ferguson, George Skinner, Willis Hutson.

MISCELLANEOUS CONTRACTS.

RETAINING WALL.—Warren, Pa.—Bids are asked until Oct. 1 for a retaining wall. Joseph Hill, Chn.

PARKS.—San Francisco, Cal.—The board of supervisors have decided to lay out a park at St. Mary's Place.

FIRE HOSE.—Dunkirk, N. Y.—Bids are asked until Oct. 4 for purchasing fire hose. Wm. C. Baumgarten, Clk.

LEVEE WORK.—Dayton, O.—The board of city affairs will soon ask bids for reconstructing the levee along the Miami River, in North Dayton.

CEMENT.—Seattle, Wash.—Bids are asked until Oct. 13 for furnishing Portland cement. Capt. Harry Taylor, U. S. Engr., Burke Bldg., Seattle.

FIRE ALARM IMPROVEMENTS.—Wilmington, Del.—It is proposed to make a number of imporvements to the fire alarm telegraph at a cost of $2,000.

STEAM BOILER.—Lawrence, Kan.—Bids are asked for furnishing a steam boiler, pipe, etc., at the Haskell Institute. H. B. Peairs, Supt. School Service.

FIRE ALARM SYSTEM.—San Francisco, Cal.—Superintendent Hewitt, of the fire alarm and police telegraph, has asked the supervisor for $68,000 for a new fire alarm system and about $10,000 for the building.

DUMP CARS, ETC.—Key West, Fla.—The New Orleans Ry. & Mill Supply Co., New Orleans, La., has been awarded a contract, at $1,140, for furnishing tracks and dump cars at the Key West light house depot.

DREDGING, ETC.—League Island, Pa.—Bids are asked until Oct. 8 for dredging, filling and extending the reserve basin at the navy yard; appropriation, $120,000. M. T. Endicott, Ch. Bureau Yards and Docks, Washington, D. C.

STEEL PIER.—Atlantic City, N. J.—A steel pier will be constructed at States Ave., with a frontage of about 150 ft. Estimates for the steel work have been invited, according to reports. Geo. A. Dentzel and Kennedy Crossan are interested.

PARK.—Utica, N. Y.—The committee on public improvements of the Chamber of Commerce is considering the question of having a public park. Russel H. Wicks, Edward Trevvett, Thomas E. Kinney, John Carney and J. A. McLoughlin, Com.

DREDGING.—Waukegan, Ill.—The Lake Michigan Dredging Co., Milwaukee, Wis., is reported to have been awarded the contract for dredging the harbor at Waukegan. The contract was first let to a Detroit company, but it is said to have forfeited the contract.

CHANNEL AND JETTIES.—Barnstable, Mass.—Geo. H. Cavanagh, Boston, has been awarded a contract, at $13,690, for constructing two oak pile jetties and a channel 2,600 ft. long and 100 ft. wide, through Dead Neck beach. Woodward Emery, Chn. Harbor and Land Comrs., Boston.

BARGE.—Biloxi, Miss.—We are informed that the following bids were received Sept. 22 for furnishing a barge for the use of dredging: W. N. Johnson, Biloxi, $1,600; Kensington Engine Works, Ltd., Philadelphia, Pa., $2,325. A. C. Smith, Asst. Surgeon, U. S. Quarantine Station, Biloxi.

PIER, SLUICEWAY, ETC.—Brantford, Ont.—Bids are asked until Oct. 1 for constructing a concrete pier with stone and concrete abutment; river excavation, embankments and rip-rap walls; a timber sluiceway dam, 169 ft. long. Chas. Whitney, Chn. Bd. Wks.; T. H. Jones, Cy. Engr.

DOCKS.—North Tonawanda, N. Y.—It is stated that the Tonawanda Iron & Steel Works has contracted with Edward H. Rogers, of Tonawanda, N. Y., for the construction of a continuation of its present dockage. The dock which is about to be constructed will be about 500 ft. in length and will be along the river front of the company's property.

OVERHAULING SHIP.—Washington, D. C.—The following bids have been received by the navy department for converting the transport "Mohawk" into a troop-ship: Cramp & Son, Ship Builders, Philadelphia, $104,000; Newport News Dry Dock & Shipbuilding Co., $98,500; J. M. Robbins & Co., $96,855; Bath Iron Wks., $82,800, and the Morgan Iron Wks., $98,800.

ELECTRIC WIRE AND POLES.—Decatur, Mich.—The following bids were received Sept. 6, 1898, for furnishing electric wire and poles for the proposed plant, the bids for the dynamos, etc., being given under Electric Light and Power, Engr., Geo. S. Pierson, Kalamazoo, Mich.:

Item.	Westinghouse Electric & Mfg. Co., Pittsburg, Pa.	Fort Wayne (Ind.) Electric Corporation.	Columbian Electric Co., Kalamazoo, Mich.	Pearl & Mills, Fort Wayne, Ind.
Poles { 30 ft.	$3.65	$3.27	$3.65	$2.50
{ 35 ft.	5.20	3.78	4.25	3.00
Wire, § a 1,000 ft.:				
No. 0000	127.80	327.37*	147.20	13.00
No. 000	106.50	264.74	131.73	11.00
No. 00	85.80	216.00	113.21	9.00
No. 0	72.50	173.83	98.39	8.50
No. 1.	58.63	139.00	84.43	7.50
No. 2.	52.03	112.96	74.38	5.50
No. 3.	44.47	90.69	64.50	4.50
No. 4.	37.69	73.27	57.10	4.00
No. 5.	....	61.99	51.62	3.50
No. 6.	30.02	51.97	47.37	3.00
No. 8.	24.99	35.46	41.39	2.00
No. 10.	22.15	26.00	37.54	1.50
Hanging lamps	6.00	22.95†	9.15	....

*Port Wayne wire prices are for double circuit. †Price includes two 35-ft. poles. §Furnished and erected.

ASPHALT PAVING.—Omaha, Neb.—The Grant Paving Co., Omaha, has been awarded the contract at $1.45 a sq. yd. for asphalt paving, and at 62 cts. a lin. ft. for curbing.

BRICK SEWER.—Kearney, N. J.—Wm. S. Logan, Township Engr., Arlington, N. J., informs us that the following bids were received Sept. 13 for constructing a trunk sewer in Kearney township, as advertised in Engineering News; contract awarded P. H. Harrison & Sons; average cut, about 17 ft.; all work above tide-water; material, common New Jersey clay and hardpan:

Bids Received at Kearney, N. J., Sept. 13, 1898, for Constructing a Trunk Sewer in Kearney Township.

Bidder.	Brick sewers 48-in., 2,550 ft.	Brick sewers 36-in., 2,650 ft.	Junctions, Special, 2, each.	Junctions, Special, 1.	Junctions, Special, 3, each.	Junction manholes, 4, each.	Brick manholes, 25, each.	Special junctions 1.	Special junctions 1.	Special junctions 1.	Catch-basins, 21 each.	Total.
Conway & Co., 491 Central Ave., Newark, N. J.	$5.40	$4.92	$100.00	$100.00	$75.00	$35.00	$15.00	$75.00	$75.00	$75.00	$75.00	$29,588
Palisade Ave. Const'n Co., 1 Montgomery St., Jersey City.	6.00	5.90	100.00	110.00	110.00	55.00	37.00	65.00	125.00	65.00	80.00	34,658
W. H. Masterson, Park Ave. and 176th St., New York..	7.68	7.25	150.00	150.00	150.00	100.00	65.00	150.00	150.00	150.00	125.00	44,517
P. H. Harrisan & Sons, 30 So. 9th St., Newark, N. J.....	4.96	4.72	175.00	100.00	135.00	40.00	30.00	150.00	200.00	50.00	80.00	29,001
W. R. Skillman, 150 Nassau St., New York.....	8.00	7.00	85.00	300.00	100.00	150.00	50.00	50.00	50.00	50.00	110.00	43,685
Harry B. Smith, 904 Shumway Ave., Long Island City...	6.76	5.68	60.00	60.00	60.00	75.00	35.00	60.00	60.00	60.00	75.00	35,580
J. M. Waddle and L. B. Fitch, 253 Broadway, New York.	9.60	8.00	460.00	225.00	225.00	165.00	45.00	325.00	250.00	75.00	100.00	51,975
Minahan, Fell & Co., Orange, N. J.	5.93	4.90	20.00	20.00	20.00	35.00	35.00	20.00	20.00	20.00	90.00	31,191
Philip Tumulty, Jr., 295 Monmouth St., Jersey City.....	6.09	5.24	250.00	250.00	250.00	50.00	50.00	150.00	150.00	100.00	100.00	35,016
Fred. Kohlmeyer, 102 Park St., Newark, N. J.	6.95	6.24	174.00	174.00	125.00	30.00	31.50	150.00	100.00	95.00	85.00	38,182
E. K. Conover, 26 Cortlandt St., New York.....	7.19	5.49	125.00	125.00	125.00	33.00	30.00	110.00	125.00	110.00	78.00	36,408
Headley & Christie, 38 Thomas St., Newark, N. J.....	6.65	6.08	80.00	80.00	80.00	60.00	36.50	80.00	80.00	80.00	95.00	36,933
Edward Sargent, Kearney, N. J.	6.40	5.60	100.00	100.00	100.00	30.00	18.00	100.00	100.00	50.00	76.00	34,176
Patrick T. Plunkett, 1099 Summit Ave., Jersey City.....	6.85	6.45	300.00	300.00	200.00	50.00	40.00	100.00	300.00	100.00	84.00	39,524
Reilly & Brubaker, 215 West 125th St., New York.....	6.50	5.80	60.00	50.00	50.00	65.00	40.00	26.00	75.00	42.00	80.00	35,384
Troy Public Works Co., Utica, N. Y.....	6.60	6.30	100.00	100.00	100.00	50.00	40.00	50.00	100.00	50.00	100.00	37,625

DAM.—Tacoma, Wash.—Henry Longstreth, of the Tacoma Land Co., has applied for permission to repair the dam on the Puyallup River; estimated cost, $2,490.

ENAMEL SIGNS.—St. Paul, Minn.—Bids are asked until Oct. 3 for furnishing enamel iron signs; certified check for 20% of bid. Pres. Bd. Pub. Wks., John Copeland.

TELEPHONE SYSTEM.—Worcester, Mass.—Reports state that a new telephone company will be organized with a capital stock of $150,000. Israel L. Currier is interested.

DREDGING.—Boston Navy Yard, Mass.—Bids are asked until Oct. 1 for dredging; estimated cost, $15,000. M. T. Endicott, Ch. Bureau Yards and Docks, Washington, D. C.

WHITE OAK SHEETING.—Cleveland, O.—Bids are asked until Oct. 6 for furnishing about 200,000 ft. B. M. of 2-inch white oak sheeting. Geo. R. Warden, Dir. Pub. Wks.

TEAM WORK.—Raceland, La.—Team men with outfits of from 10 to 20 teams are wanted immediately for a large amount of levee work. Address Rogers & Wright, Raceland.

IMPROVING CREEK.—Lockport, N. Y.—Work will begin early this fall on the improvement of Eighteen-Mile Creek. A $15,000 appropriation has been secured to cover the work.

TELEPHONE FRANCHISE.—Summit, N. J.—The Newark Telephone Co. has applied to the council for a franchise to operate in this place. Jos. A. McClary, Rahway, N. J., may be addressed.

DREDGING.—New York, N. Y.—Bids are asked until Sept. 30 for about 200,000 cu. yds. of mud dredging in the North River, at West 34th St. J. S. Cram, Comr. Docks, Pier A, North River.

OAK SHEETING.—Cleveland, O.—Bids are asked until Oct. 6 for furnishing about 200,000 ft. B. M., of 2-in. white oak sheeting in lengths of 13 ft. 6 ins. Did Pub. Wks., Geo. R. Warden.

DREDGING.—Pensacola Bay, Fla.—Bids are asked until Oct. 22 for dredging at the entrance of Pensacola Bay, as stated in our advertising columns. Maj. F. A. Mahan, U. S. Engr., Montgomery, Ala.

DREDGING.—Oakland, Cal.—Bids are asked by the board of public works until Oct. 12 for about 600,000 cu. yds. of dredging in Lake Merritt; estimated cost, $80,000. (Postponement from Oct. 5)

LEVEE WORK.—New Orleans, La.—Bids are asked until Oct. 19 for constructing about 132,500 cu. yds. of earthworks in Barataria levee district. Maj. J. H. Willard, U. S. Engr., 3232 Prytania St.

DREDGING.—Newport, R. I.—Bids are asked until Oct. 26 for dredging in Providence River and Narragansett Bay, R. I., as stated in our advertising columns. Maj. D. W. Lockwood, U. S. Engr., Newport.

BUILDING BRICK.—Philadelphia, Pa.—Bids are asked until Oct. 10 for furnishing 9,000,000 building brick, as stated in our advertising columns. E. Kleinsmith, N. W. corner of 13th St. and Market Sts.

BROKEN STONE, ETC.—Long Island City, N. Y.—Bids are asked until Oct. 4 for furnishing broken stone and screenings of trap rock and gravel. J. P. Keating, Comr. Highways, 150 Nassau St., New York.

MACHINERY AND TOOLS.—Naval Station, Puget Sound, Wash.—Bids are asked until Oct. 18 for furnishing machinery and tools. Edwin Stewart, Paymaster-Gen., Bureau of Supplies, Washington, D. C.

CEMENT, BROKEN STONE, ETC.—Newport, R. I.—Bids are asked until Oct. 26 for furnishing cement, broken stone and sand, as stated in our advertising columns. Maj. D. W. Lockwood, U. S. Engr., Newport.

CONTRACT PRICES.

INCANDESCENT LAMPS.—Chicago, Ill.—W. B. Wickersham, Secy., Public Library, informs us that the following bids were received Sept. 21, 1898, for furnishing 10,000 incandescent lamps for the library building:

Bidder.	10-c. p., cts.	16-c. p., cts.	32-c. p., cts.	Frosted, 16-c. p., cts.	Frosted, 32-c. p., cts.
J. C. Wormley & Co., Chicago...	15½	15½	24½	18½	27½
Chicago Edison Co., Chicago....	17	17	27	19⅝	32⅝
Buckeye Electric Co., Chicago ..	17	17	25½	20	30
The K. & W. Co., Pittsfield, Mass.	16	16	24	19	28
Columbia Incandescent Lamp Co*	17	17	26	20⅝	31½
Fostoria-McQuay Co., Chicago...	16	16	25	20	29
Western Electric Co., Chicago...	17	17	26	20⅝	31½
Martin J. Insull, Chicago.....	16	16	26	21	31
Standard Lamp Co., Wabash, Ind.	14	14	22	18	27
Warren (O.) Elec. & Specialty Co.	14	14	23	16¾	27

*St. Louis, Mo.

TUNNEL SEWER.—Milwaukee, Wis.—The board of public works received the following bids Sept. 16, 1898, for constructing Section 6 (2,970 ft.) of the 10-ft. 30th St. brick tunnel sewer; the bids received a few weeks ago are also given—they were rejected as too high; all bidders of Milwaukee, except J. O. Jones, Racine, Wis.; Secy., Daniel B. Bush:

Bidder.	Bids. First.	Bids. Second.
Charles Forrestal	$26.00	$26.50
R. J. Hickey	29.15	26.50
Reichert Construction Co.	29.15	25.85
James Markey	29.15	26.70
John O. Jones	27.00	21.94
A. Kellner	32.70	24.70
James O'Donnell (accepted)	29.00	....
John J. Crilley	26.30	21.39
J. S. O'Neil	....	25.90

BRICK PAVING.—Watertown, Wis.—G. H. Stanchfield, Engr., Watertown, informs us that the following bids were received Sept. 17 for brick paving; the bids were rejected; the pavement is to be laid on 6 ins. concrete 1—2—5:

Quantities.	James Cape & Sons, Racine, Wis.	J. Walsh, Davenport, Ia.
Cut	2,700 cu. yds. $0.30	$0.35
4 x 30-in. curb	2,166 lin. ft.. .69	.65
Protection curb	592 " " .30	.40
Pavement: Pumiton brick	5,730 sq. yds. 1.80	1.66
Clinton block	5,730 " " 1.82	...
C. I. gutter bridges	192 each... .90	.80

SUPPLIES.—Fortress Monroe, Va.—Capt. Thos. L. Casey, U. S. Engr., Norfolk, Va., received the following bids Sept. 16, 1898, for furnishing cement, lumber, bolts, etc.; (1) being for American cement, 27,000 bbls.; (2) for Portland cement, 1,250 bbls.; (3) for 2-in. broken stone, 10,650 cu. yds.; (4) for 1-in. broken stone, 7,100 cu. yds.; (5) for broken stone granolithic size, 130 yds.; yellow pine lumber —(6) 10,000 ft. B. M., 1 x 12-in. x 16 ft.; (7) 2 x 4-in. x 16 ft., 2,400 ft.; (8) 2 x 12-in. x 16 ft., 32,000 ft.; (9) 2 x 12-in. x 16 ft., dressed, 32,000 ft.; (10) 2 x 6-in. x 16 ft., 6,000 ft.; (11) 3 x 4-in. x 16 ft.; (12) 3 x 4-in. x 26 ft., 7,500 ft.; (13) 3 x 4-in. x 20 ft., 9,750 ft.; (14) 3 x 6-in. x 16 ft., 2,400 ft.; (15) 1¼ x 3-in. x 16 ft., 6,000 ft., B. M.; steel bolts—(16) 2-in. x 8 ft., 10½ ins., 16; (17) 2½-in. x 6 ft., ⅝-in., 36; (18) 2½-in. 9 ft., 2⅞-in. 42; (19) 2-in. steel ring bolts, 20; (20) I-beams and channels, 127,807 lbs.; (21) connection angles, 240 pairs; (22) cast-iron columns, 5: Standard Lime and Stone Co., Baltimore, Md.—(3, 4 and 5) $1.80 a cu. yd.; R. H. Hood & Co., St. Paul Bldg., New York—(1) 84 cts. a bbl., (2) $2.30 a bbl., (3, 4 and 5) $1.389 a cu. yd., (16) $6.40 each, (17) $7.70, (18) $9.40, (19) $7.50, (20) 1.7 cts. a lb., (21) 2¼ cts. a lb., (22) 3 cts. a lb.; Petersburg Iron Works Co., Petersburg, Va.—(16) $3.92, (17) $4.53, (18) $5.48, (19) $5.12, (22) 2¾ cts.; Lawrenceville Cement Co., 26 Cortlandt St., New York—(1) 66.9 cts.; Chas. G. Smith & Son, Washington, D. C.—(3) $1.63, (4) $1.68, (5) $1.88; Atlas Cement Co., 143 Liberty St., New York—(2) $2.41; J. B. Kendall, Washington, D. C.—(18) $7.15, (17) $8.50, (18) $8.50, (19) $7.15; New Jersey Foundry & Mach. Co., 26 Cortlandt St., New York—(16) $4.25, (17) $4.50, (18) $4.75, (19) $6.00, (20 and 21) 1.65 cts., (22) 2.1 cts.; H. A. Rogers, New York—(16) $3.95, (17) $4.40, (18) $6.35, (19) $3.75, (20) 1.67 cts., (21) 1.67 cts., (22) 2.1 cts.; Washington & Potomac River Iron & Land Co., Washington, D. C.—(3) $1.30, (4) $1.69, (5) $1.25; New York & Rosendale Cement Co., 280 Broadway, New York—(1) 66⅔ cts.; T. R. Chapple & Co., Richmond, Va.—(3, 4 and 5) $1.52; Jos. Leopold, New York—(3 and 4) $1.56, (5) $1.87; Duke & Smith, Norfolk—(6) $14 per 1,000 ft. B. M., (7) $13, (8) $13.50, (9) $16, (10) $12.50, (11) $12.50, (12) $13, (13) $13, (14) $12.50; (15) $15; McClenahan & Bro. Granite Co., Port Deposit, Md.—(3, 4 and 5) $1.39, (6, 7, 8, 10, 11, 12, 13 and 14) $11, (9) $14, (15) $15.

CEDAR BLOCK PAVING.—Duluth, Minn.—It is stated that P. McDonnell, Duluth, has been awarded the contract for about four miles of cedar block paving at $1.06 a sq. yd.

Mail Delivery Notice.

Special efforts are made to deliver our paper to its readers each week at the earliest possible moment. The largest binding and mailing establishment in New York begins work on Engineering News early each Wednesday evening, and all papers for Boston, Philadelphia and Washington are usually in the New York post-office by midnight; all Brooklyn and New York city papers by 3 o'clock—in ample time for the first delivery Thursday morning. The entire edition, including foreign copies, is in the mail soon after 6 o'clock Thursday morn- If your paper is not received promptly we advise that you make a complaint to your local post-office officials.

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